Illinois Route 159
Feasibility Study Report

for the
City of Collinsville, Illinois

Revised Final Draft
July 2004

OATES ASSOCIATES
Consulting Engineers

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APPENDICES

1. INTRODUCTION

The City of Collinsville (the City) and the Illinois Department of Transportation (IDOT) have initiated a study to determine the feasibility of improving Illinois Route 159 (IL-159) through Collinsville.

Due to the increasing pressures of ongoing development and the resulting increase in traffic, IDOT is currently improving IL-159 in two large segments from Fairview Heights to Collinsville and from Maryville to Edwardsville. These improvements include expanding the existing two and three-lane facilities to five-lanes (four through lanes and one two-way left turn lane).

Because of this ongoing development and recent upgrade, the City has identified the need to improve the deficient sections of IL-159 through the City. Alternates have been evaluated that range from improving the existing route to providing a supplemental route nearby.

Illinois Route 159 serves major through movements between important centers of activity, carries a substantial portion of the generated trips entering and leaving the area, and provides a connecting route to Interstates 270, 55/70, and 64 in the Metro-East region. This study examines current and future traffic demands, land use, and environmental impacts in an analysis for the following options:

- Modifying the existing alignment
- six alternate routes that will supplement existing Route 159 traffic
- and a “do nothing” or “no action” approach

The need for improvements to IL-159 in this area was identified as far back as 1964, when a regional transportation study suggested an “east bypass” to supplement existing IL-159. Similar options for improvements have been evaluated since then, but have never garnered sufficient support from local business leaders and elected officials. Most recently, the City’s 1997 Comprehensive Plan “Vision 20/11” included a recommendation for an “Illinois 159 East ByPass”.

2. PURPOSE AND NEED

A feasibility study is typically initiated to assess whether or not a proposed highway improvement warrants further study. The purpose of this study is to evaluate all feasible corridors within a given area and determine if there is justification for additional engineering studies. The feasibility of a corridor not only depends on the raw construction costs of a project but also the social, economic, environmental, and engineering effects of the proposed improvements within each corridor. The conclusion to this report will provide data supporting preferred alternates consistent with City and public support.

Recommendations derived from this study can be used for detailed analysis during preliminary engineering design (Phase I), which is expected to begin in late 2004. The Phase I engineering study will use actual "on-the-ground" field surveys and investigations. A preferred route will be determined in this Phase 1 study. While the preferred route chosen in Phase 1 could be one of the routes recommended in this report, the possibility exists that circumstances unknown during the Feasibility Study could result in modifications to or a selection of another route.

2.1. Goals And Objectives

2.1.1. Improve Traffic Flow

- Provide safe operations.
- Improve accessibility to and from the study area by local trip generations and improve through movements by destination driven traffic.
- Develop transportation improvements consistent with public support and direction.
- Provide continuity in roadway improvements currently be done in the region.

2.1.2. Economic Development

- Support the City's Comprehensive Plan "Vision 20/11".
- Coordinate transportation improvements with anticipated development and growth.
- Aid the City of Collinsville in future growth while providing a transportation facility that is an economic benefit to the region.
- Facilitate the movement of goods.

2.1.3. Historical and Environmental

- Preserve and enhance the natural, historic, and cultural resources of the city.
- Improve air quality by alleviating traffic congestion.
- Ensure public awareness by providing information consistent with public concerns.
- Minimize potential negative socio-economic and environmental impacts.

3. EXISTING CONDITIONS

Information for this report was obtained through record sources from the City of Collinsville, Madison County, IDOT, the Illinois State Geospatial Clearinghouse, and various other sources. Informational meetings were held with the general public to supplement the record data. In addition, presentations were made to various public interest groups, City officials, Township officials, and IDOT as the study progressed.

Site visits were made and ground photographs were taken to verify existing conditions and to note any features that might influence route selection. Aerial photography, USGS mapping, and tax maps were used to supplement the visual field investigation. A full size USGS topographic map, Madison County tax map, an aerial photograph, and ground photos are included in Appendix A. Ground level photographs along various routes are also in Appendix A. Actual on-site field surveys were not performed as part of this study but will be included as part of the Phase I preliminary engineering study.

3.1. Study Area

The study area is bound by existing IL-159 on the west, Interstate 55/70 to the north, the abandoned Norfolk Southern railroad on the east and Madison/St. Clair County line to the south. The total study area encompasses about 9 square miles (See Figure 3-1).

Roughly half of the study area lies within the Collinsville corporate limits, with the remaining in an unincorporated section of Madison County in Collinsville Township. The area lying within the City limits is predominately single-family residential homes with commercial and business along the existing corridor. The area outside of the City limits is comprised mostly of farmland, woodlands, and some rural single-family residential development. Canteen Creek is a major stream located in the middle of the study area. There are numerous tributaries that dissect the area and contribute to the flow of Canteen Creek.

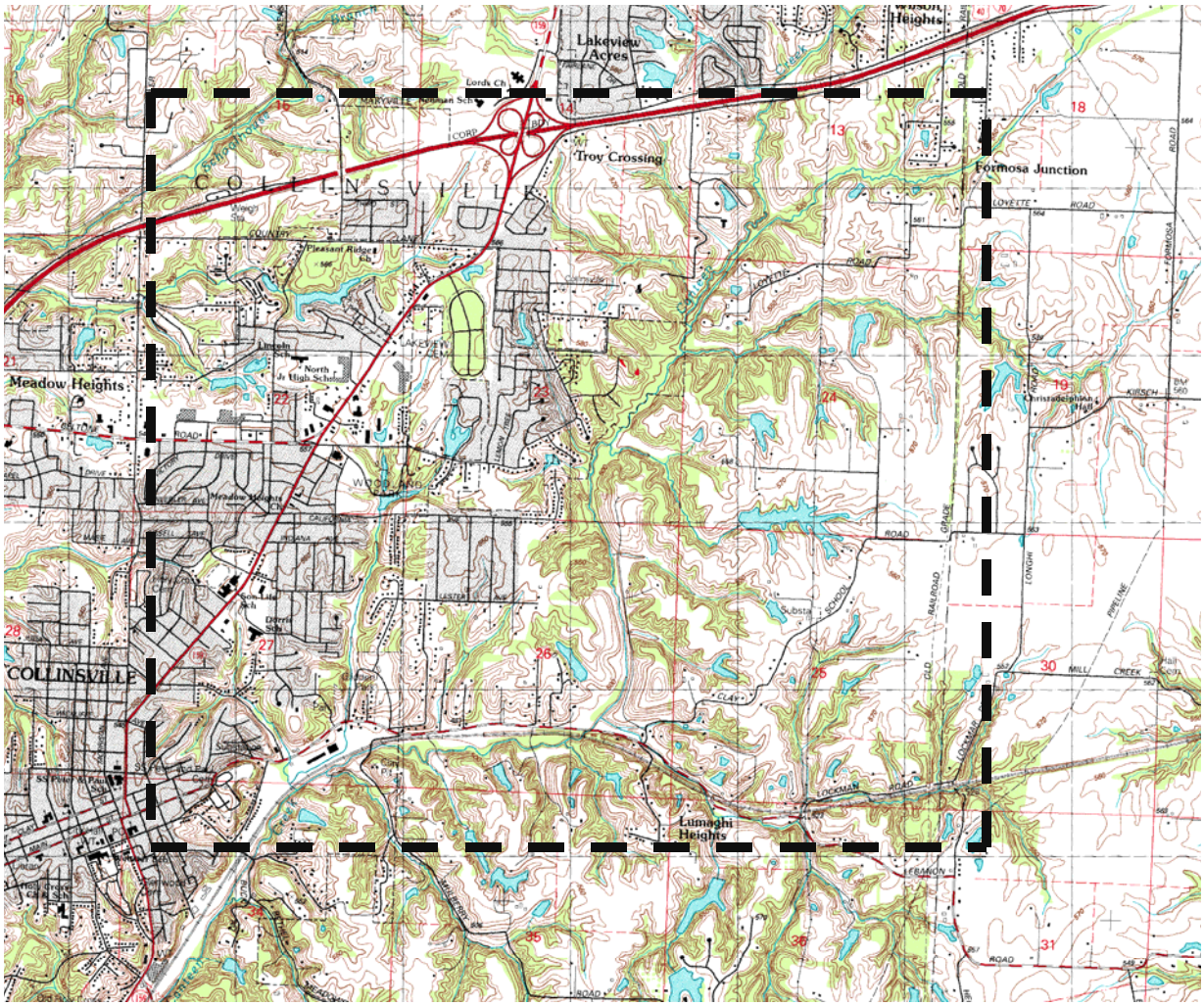


Figure 3-1 – Study Area
(1991 USGS Quadrangle)

3.2. Population

While Collinsville's population has not increased at the rate of neighboring communities, growth has still exceeded that of the overall County during the past 20 years. The City's population has grown about 26% over a 20-year period from 1980 to 2000 while Madison County has seen roughly 4.5% growth over the same period of time. Municipalities contributing to the traffic on IL-159 through Collinsville – primarily Edwardsville, Glen Carbon, and Maryville – have grown at accelerated rates in comparison to Collinsville and to Madison County on the whole. As seen in the census figures in Table 3-1, Maryville, Edwardsville, and Glen Carbon have grown at rates of about 3% a year for the last 20 years. Given the current development trends in the region and the amount of open land available for development, rapid growth is likely to continue.

A study entitled "Long-Range Population and Employment Projections" done by the East-West Gateway Council in June of 2004 estimates the population of Madison County to reach 293,100 by the year 2025. This compares projected 2025 population growth used in this report of 289,900, which was based on a growth rate of 1% a year. The study also mentions that development monitoring at the sub-county level has noted that additional growth since 2000 has occurred in the bluff line (beyond the American Bottoms flood plain) communities and in the Highland area. The study adds that some of this growth could be attributed to the moving of population from the older industrial cities in the Alton and Granite City areas. New highways such as I-255 can also attract growth, but, again, some will undoubtedly be a result of movement from other parts of the county.

Table 3-1 Population Trends

	1980	1990	2000	Ave. Annual % Change from 1980-2000	Overall % Change from 1980-2000	Projected 2025
Collinsville	19,613	22,446	24,707	1.2	26.0	31,700*
Maryville	2,052	2,576	4,651	4.2	126.7	6,000*
Glen Carbon	5,197	7,731	10,425	3.5	100.6	13,400*
Edwardsville	12,437	14,579	21,491	2.8	72.8	27,600*
Madison Co.	247,691	249,238	258,941	0.22	4.5	289,900**

* assumes an annual growth rate of 1% per year from year 2000
** information provided by the East-West Gateway Coordinating Council

3.3. Land Use

The western half of the study area is almost completely built-up with very little open land remaining for development. Commercial sites and businesses line the immediate IL-159 and the Beltline road corridor (see Figure 3-2). The remainder of the area away from these routes is predominately single-family residential.

Further east of existing IL-159 and still within the City corporation limits, land use is nearly all single-family residential with small pockets of duplexes, condos and townhouses. The land is largely developed to the Canteen Creek watershed area. East of Canteen Creek is a mix of agricultural, pasture, and forested areas as well as larger single-family residential tracts roughly five to ten acres in size. Sporadic residential subdivisions are evident near I-55/70 on the north, Lebanon Road on the south, and along Formosa Road to the east.

While the area immediately adjacent to the existing IL-159 corridor is nearly built to capacity, the potential for overall growth in the study area remains relatively high due to the undeveloped regions further east. Over half of the study area remains agricultural and forested with the potential for development. Most of this undeveloped area is unincorporated and lies within Collinsville Township.

The City's current Comprehensive Plan "Vision 20/11" addresses potential residential growth in the area east of Collinsville (copies of relevant sections are in Appendix B). Projected zoning is shown in Figure 3-3. This plan also addressed traffic growth with a projected "Illinois 159 East ByPass" also shown on Figure 3-3.

The City is currently in the process of updating the Comprehensive Plan. The City is also, in cooperation with Troy and O'Fallon, working on an agreement to determine potential limits of expansion for each municipality. Zoning and limits of the potential expansion are shown in Figure 3-3. It continues to be assumed that the majority of the development eastward would likely consist of single-family residential development.

Figure 3-2 - Existing Land Use

Figure 3-3 - Planned Land Use

3.4. Employment

Other than the small businesses located along the Beltline and existing IL-159, major centers of employment in the region lie mostly to the north and south of the study area (see Figure 3-4). These employment centers are:

- Scott Air Force Base, the largest employer in the Metro-East area, is located just south of Interstate 64 between Illinois Route 4 and Illinois Route 158 near Shiloh in St. Clair County, having a workforce of nearly 13,000 people.
- Fairview Heights is considered the retail hub of the region. Most of the retail stores in that area are located on IL-159 within a mile of I-64. Consumers from north of Collinsville access Fairview Heights using IL-159. The labor force of the major retail stores in Fairview Heights exceeds 1,275 people.
- Southern Illinois University at Edwardsville is both a large employer and destination for college commuters in the region. The university employs about 2,300 and has a 2003-2004 enrollment totaling more than 12,000 students.
- St. Elizabeth and Memorial Hospitals in Belleville and Anderson Hospital in Maryville employ roughly 2,200, 1,700, and 850 people respectively. Anderson Hospital in Maryville is the only hospital in the immediate vicinity of the study area.
- Southwest Illinois Community College located at the east side of Belleville on Green Mount Road employs about 400 people. The 2003-2004 enrollment is around 13,000 students.
- Madison County government in Edwardsville employs roughly 1,150 people with St. Clair County government in Belleville employing about 1,000 people. Both courthouses are located near IL-159.

(source: Illinois Department of Commerce and Economic Opportunity)

According to published information by the East-West Gateway Coordinating Council, Madison County has seen a loss of about 1,300-1,500 manufacturing jobs since 2000. These job losses have mainly occurred primarily among four large industries in the Alton and Granite City areas. During the same post-2000 time frame however, approximately 1,000 jobs have been created at the Gateway Commerce Center near Mitchell. With the extension of I-255 through Godfrey, additional jobs will undoubtedly be created but exactly to what extent is unknown.

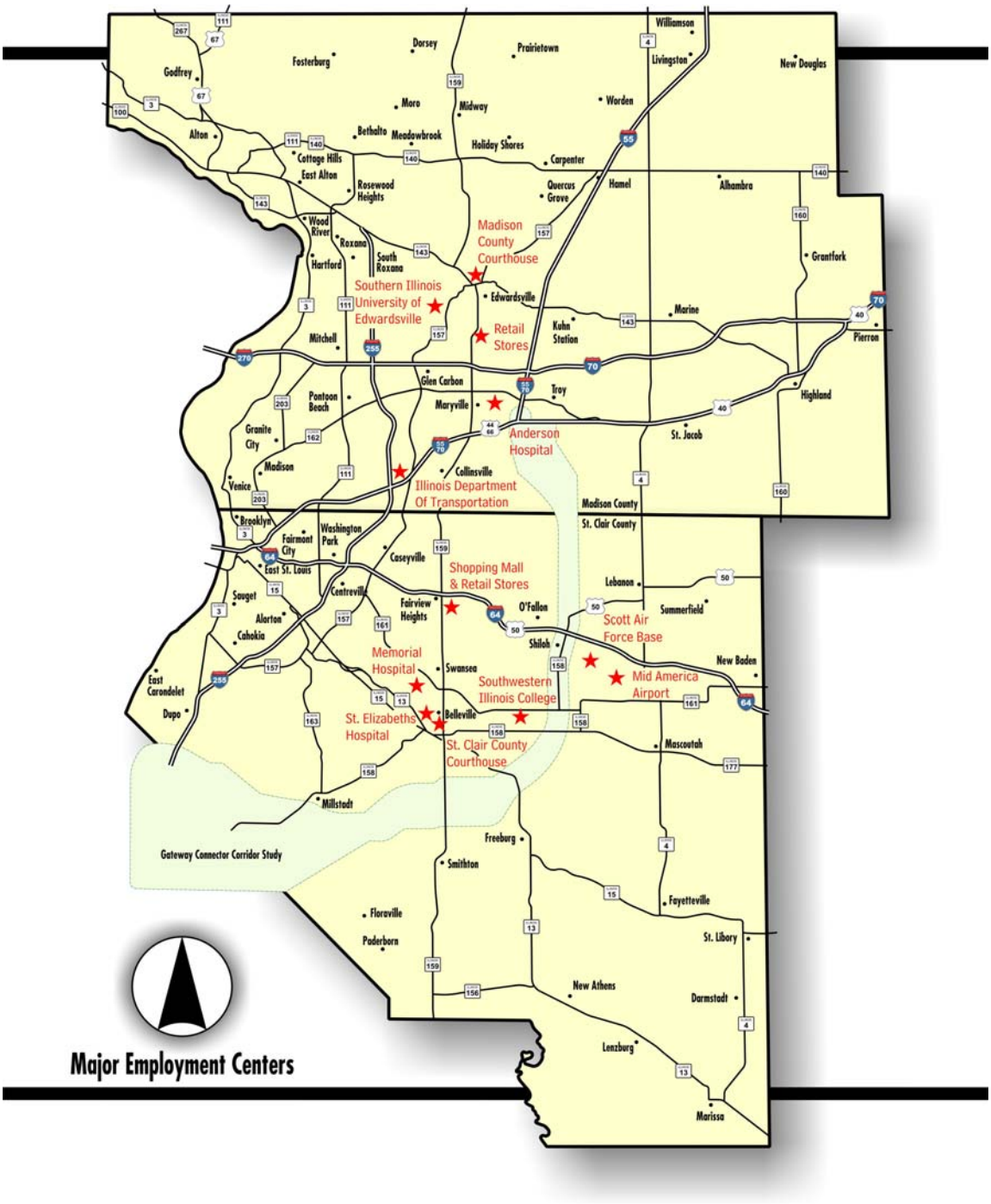


Figure 3-4 – Major Area Roadways and Employment Centers

3.5. Existing Transportation Networks

3.5.1 Major Routes in the Region (see Figure 3-4)

Illinois Route 159 is classified as a "principal arterial route" from Edwardsville to Belleville and serves as an important north/south route through the Metro-East region. Municipalities in Madison County that share the IL-159 corridor are Edwardsville, Glen Carbon, and Maryville to the north, Collinsville, Fairview Heights, Swansea, and Belleville to the south. The roadway is an undivided highway consisting mainly of four traffic lanes with a two-way left-turn lane with the exception being the 2.5-mile segment through Collinsville. The roadway typical section varies according to location and is rural in nature (shoulders with roadside ditching) between municipalities. Suburban and urban areas consist of an urban typical section (curb and gutter with storm sewer). There is a relatively high density of driveway and side street intersections along the route.

Illinois Route 157, a region arterial, is another north/south oriented regional arterial state highway running from Edwardsville to Centerville. It generally parallels IL-159 about two to three miles to the west and is situated at the foot of the steep bluff-type terrain of the uplands. The roadway is predominately two travel lanes wide through the rural areas and four travel lanes wide with a two-way left turn lane in the urban sections. Current ADT varies according to location - about 15,000 vehicles per day in Edwardsville to about 10,000 near Illinois Route 13 in Centerville.

Illinois Route 255 is a major north/south, four-lane divided, access controlled highway in the region. The route currently ends near Wood River but construction is currently under way to extend the route to Godfrey. The route will eventually connect St. Louis to St. Paul/Minneapolis. In the metro-east area, Illinois Route 255 parallels Illinois Route 157 about a mile to the west. Average daily traffic between Interstate 55/70 and Interstate 64 is roughly 48,200 vehicles.

Interstate 55/70 is a four-lane divided, access-controlled interstate that divides Collinsville and Maryville along the northern limits of the study area. It serves as a major transportation route from St. Louis to Chicago that carries 46,700 vehicles per day through in the region.

An expressway corridor, known as the Gateway Connector, from Troy in Madison County to Columbia in Monroe County is currently under Phase I preliminary engineering. The feasibility study for this route noted that the area it intends to serve is expected to grow in population by 25% over the next 20 years. IDOT is acting to preserve a corridor before development makes the alignment choice more difficult and more costly. The corridor currently under analysis (see Figure 3-4) begins at the I-55/70 interchange and roughly follows the Troy/O'Fallon roadway to existing Illinois Route 158. From there, the planned roadway follows Illinois Route 158 around the east side of Belleville. The Gateway Connector would then travel on new alignment in a westerly direction just north of Freeburg

and south of Millstadt to Columbia and IL-255 near Illinois Route 3. This route will serve as an "outer belt" highway around the Metro-east region. General design standards for the roadway include a design speed of 70 mph, partial access control, and consist of four traffic lanes. Projected traffic from recent studies revealed that traffic volumes would range from 16,000 to 45,000 per day.

3.5.2. Minor Routes in the Study Area (see Figure 3-5)

The Beltline is a four-lane roadway located in the northern part of Collinsville. The roadway serves as an east/west connector from Illinois Route 157 to IL-159. The Beltline is home for most of the major retail stores as well as commercial development in Collinsville. Current average daily traffic is around 20,000 vehicles. The roadway is maintained by IDOT.

California Street is a local, city maintained, generally twenty feet wide oil and chip street beginning at IL-159 and ending about a mile to the east. This east/west local street is situated about a half mile south of the Beltline. Current daily traffic is around 1,500 vehicles.

Pine Lake Road is another east/west two-lane local street that begins at IL-159 and the eastern terminus of the Beltline. The roadway is a federal aid urban (FAU) route. This roadway primarily provides access into and out of the Collinwood residential development east of IL-159. The roadway was partially improved with a federal aid urban grant in 1999 that upgraded the roadway to a concrete wearing surface and concrete curb and gutter with storm sewer. The improvement included the section of roadway from IL-159 to the eastern limits of Woodland Park. Pine Lake has an average daily traffic of about 5,500 vehicles at the intersection of IL-159.

Country Lane is a two-lane east/west local street about a mile south of Interstate 55/70. The section of roadway east of IL-159 has been recently improved by the Township with bituminous surfacing and the addition of concrete v-gutter and storm sewer. The roadway is under the maintenance and jurisdiction of Collinsville Township. Current traffic shows about 3,200 vehicles a day use this roadway. The section of roadway west of IL-159 has also been reconstructed with bituminous surfacing, barrier concrete curb and gutter, storm sewer, and sidewalks.

Main and Clay Streets make up a one-way "couple" in downtown Collinsville. Main Street carries two lanes of traffic eastward while Clay carries two lanes of traffic west. Both roadways are bituminous overlay with concrete curb and gutter. General width for each roadway is forty feet face of curb to face of curb. Current daily traffic is about 7,500 cars each way.

Spring Street is a two-way, twenty feet wide oil and chip urban collector street that is listed as an FAU route. The road carries about 2,500 vehicles a day and is on the City's long-range plan for reconstruction.

Keebler Avenue is an improved bituminous two-lane north/south roadway running from Illinois Route 162 in Maryville to Wickliffe Street in Collinsville. Current traffic figures indicate about 10,400 vehicles a day using the roadway near the Beltline and about 3,450 vehicles a day near Wickliffe.

Lebanon Road, another City FAU route, is a two-lane, bituminous, east/west collector route. Much of the roadway in the urbanized portion near and within the Collinsville city limits has curb and gutter. Further east the roadway is rural in nature with roadside ditching. The section of Lebanon Road in the study area is maintained by Collinsville Township. The roadway links Collinsville to the Troy/O'Fallon roadway. ADT is around 4,000 vehicles in the study area.

Loyette Road is a rural roadway of varying width and construction. The roadway is predominately oil and chip construction and approximately twenty feet in width and rural in nature with open ditching. Collinsville Township has jurisdiction and maintenance of the roadway from the east to the abandoned Norfolk Southern railroad. Further west, the roadway is privately owned and maintained through an agreement between the homeowners that use the roadway.

The I-55/70 south frontage road is a bituminous surfaced roadway about twenty-four feet in width. The roadway typical section is rural with ditches and some sporadic concrete guttering. Collinsville Township has jurisdiction and maintenance of the roadway.

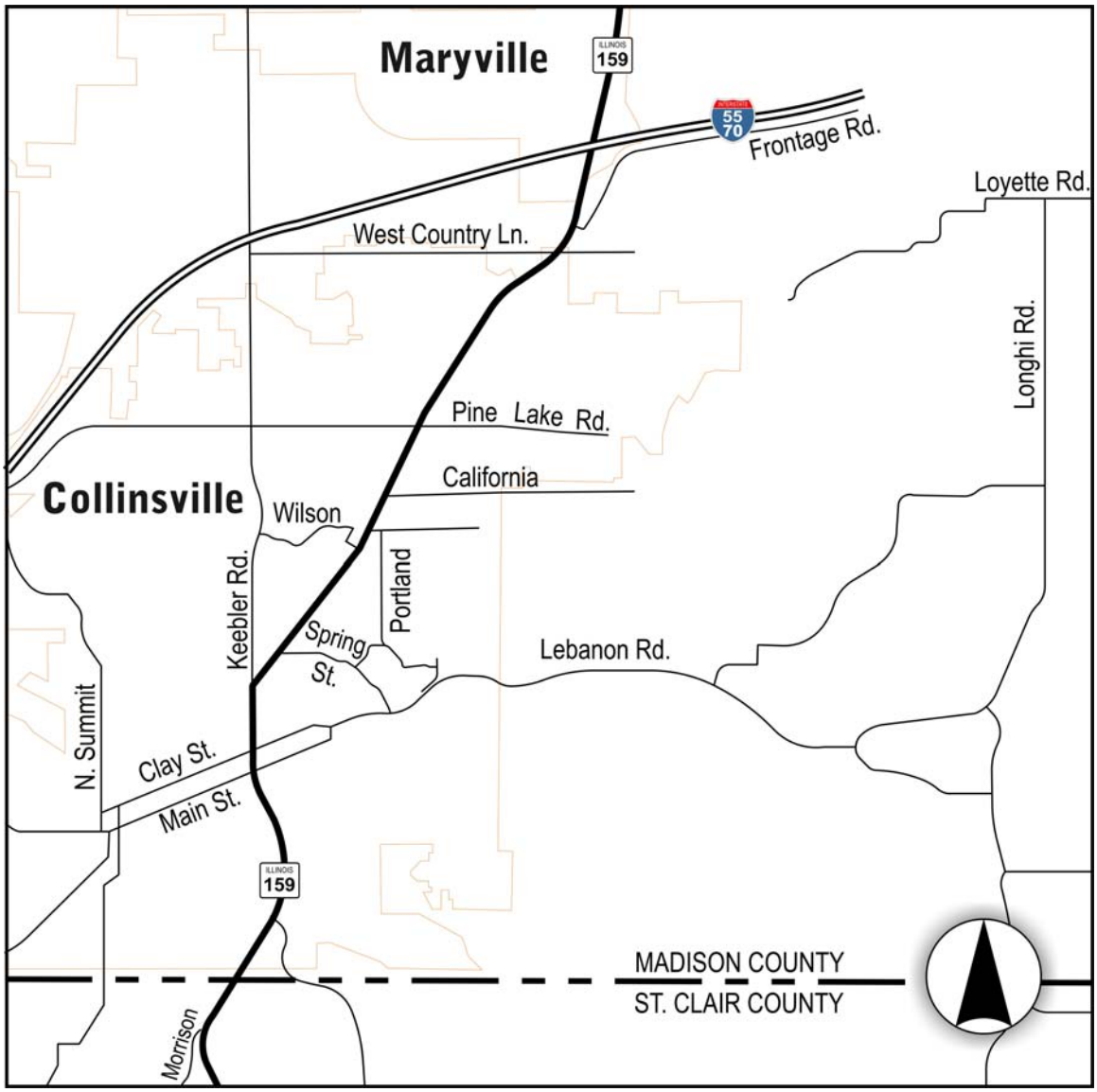


Figure 3-5 –Minor Routes in the Study Area

3.6 Pedestrian, Public Transportation and Bicycle Networks

Pedestrian traffic is frequent along existing IL-159 especially near the downtown area and in areas connecting residences to the various shopping destinations and public transportation.

Public transportation is offered along much of IL-159 and the downtown area. Madison County Transit has bus routes with stops along the route (see Figure 3-6) and has plans to provide a transit center in downtown on Clay Street.

Illinois Route 159 is a caution advised route for bicyclists. While the roadway is forty feet in width from face of curb to face of curb for most of the study area, no dedicated bicycle lanes exist. The nearest bike path is the Schoolhouse Bike Trail located about a half mile north of I-55/70. The bike path currently begins at Horseshoe Lake in Granite City and extends to Illinois Route 162 at the western edge of Troy. Current construction will link this section of trail to the remainder of the Madison County Transit trail network in Edwardsville.

3.7 Accident Data

Roadway segments between Loop and Hill, Grove and Main, Clay and Johnson, Johnson and Madison, Wickliffe and Valley have been identified High Accident Location (HAL) rate segments. The Wickliffe intersection has been identified as a HAL rate intersection. These high accident locations are located in and near the downtown area and could be a result of the congestion due to the reduction in lanes in the downtown area.

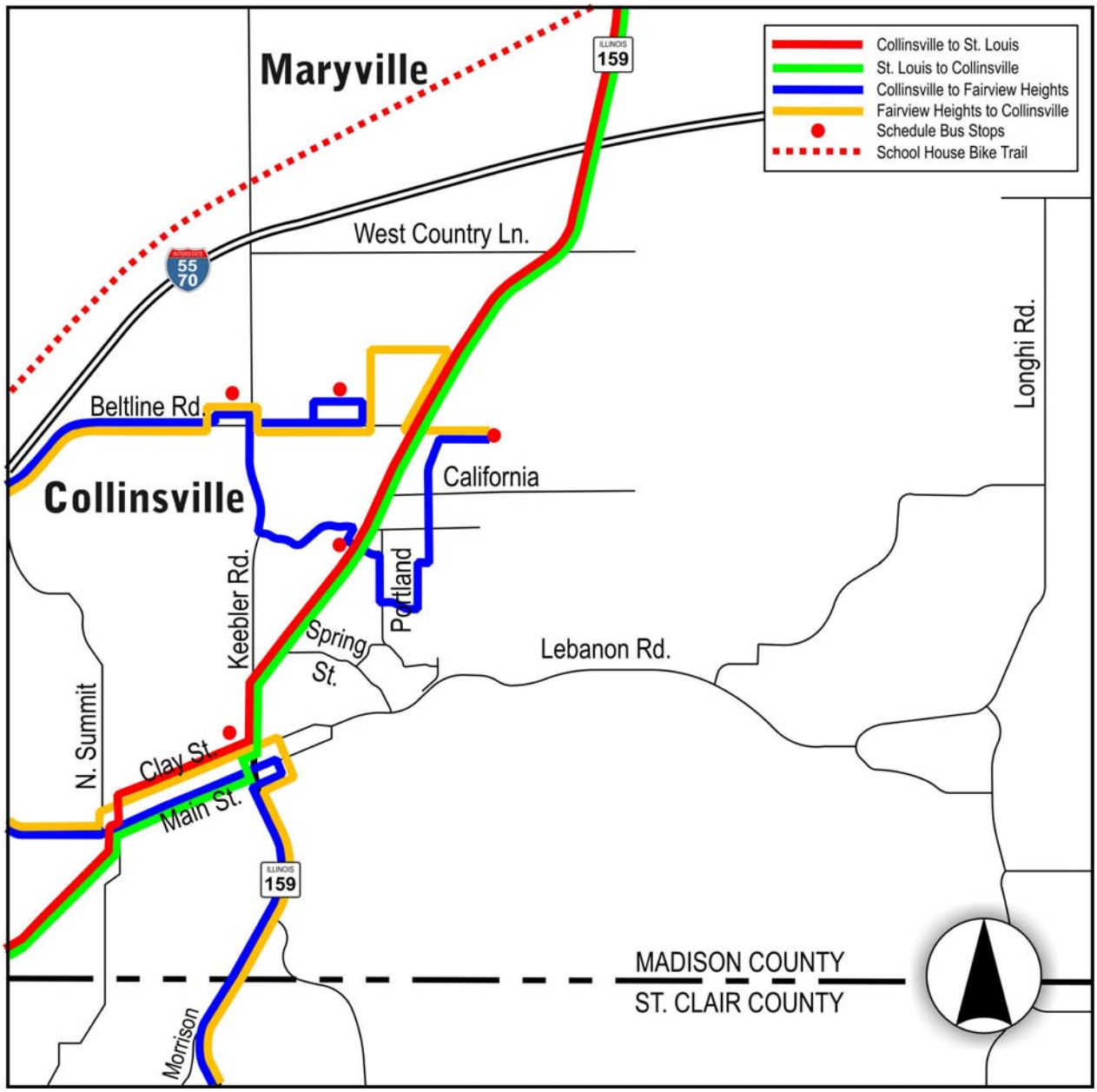


Figure 3-6 - Public Transportation and Bike Routes
(Source: Madison County Transit District)

3.8 Environmental Features

3.8.1 Parks, Recreational and Section 4(f) Sites

Areas that could potentially be directly or indirectly impacted by a route include (see Figure 3-7):

- Lakeview Cemetery is located in the southeast quadrant of the intersection of IL-159 and Country Lane.
- St. Peter and Paul Catholic Church and school is situated on the west side of IL-159 a block north of Clay Street.
- Woodland Park is situated about a quarter mile east of IL-159 on Pine Lake Road.
- Glidden Park is located just north of Lebanon Road about a half mile east of Spring Street.
- St. Peter and Paul Cemetery is located on the south side of Main Street/Lebanon Road near the intersection of Spring Street.
- Son Life Church and school (also known as the Collinsville Christian Academy) is located on the west side of IL-159 about midway between downtown and the Beltline.

3.8.2 Floodplain and Waterways

Federal Emergency Management Agency (FEMA) flood plain mapping was evaluated for impacts (See Figure 3-8). Canteen Creek intersects the middle of the study area flowing in a northeast to southwest direction. A flood insurance study for Canteen Creek was done by FEMA in 1981. From that study, the 100-year peak discharge for Canteen Creek through the study area was determined to be about 7,500 cubic feet per second. No other floodplains or major waterways are in the study area.

3.8.3 Wetlands

National Wetland Inventory (NWI) mapping was evaluated for impacts (See Figure 3-8). Canteen Creek intersects the middle of the study area flowing in a northeast to southwest direction. A significant portion of the study area included in the Canteen Creek watershed is forested. Outside of the Canteen Creek watershed and its tributaries, the only wetlands noted are farm ponds and lakes

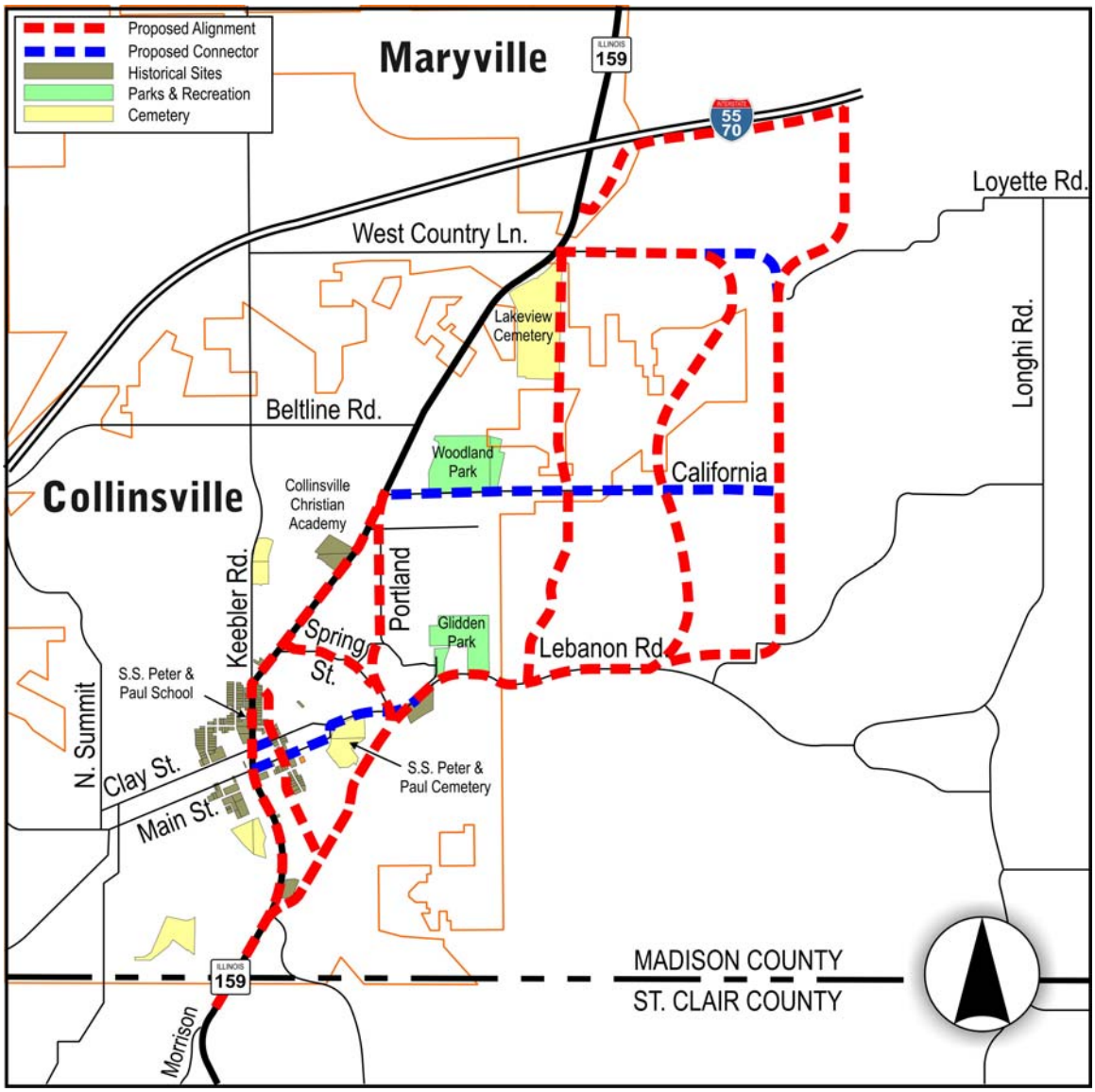


Figure 3-7 - Parks, Recreational and Section 4(f) Sites
(Sources: IHPA, Collinsville Historic Preservation Committee)

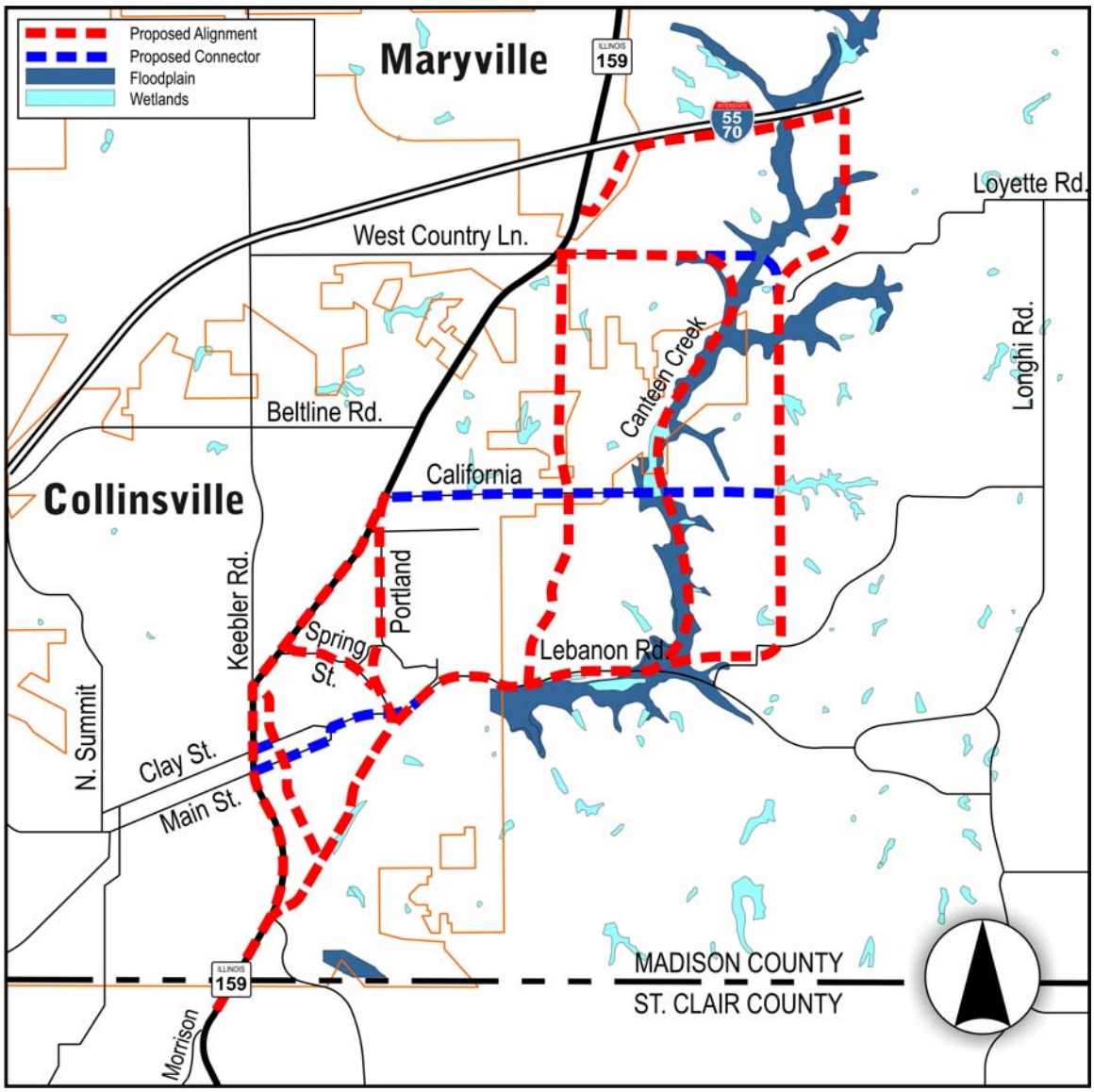


Figure 3-8 - Wetlands and Floodplains
(Source: IDNR, FEMA)

3.8.4 Historical and Cultural Features

The City is currently undertaking an historic preservation plan delineating an historic district in the downtown area. As can be seen on Figure 3-9, this district covers much of the downtown area along IL-159 from Church Street to Wickliffe Street including several blocks to the east and west. Because of this designation, the historical district will be eligible for future aid and assistance regarding historical related projects.

The former Brooks Foods facility along the east side of IL-159 north of Clinton Street was named to the Nation Register of Historic Places in 2002. The vacant plant is home of a historic piece of roadside Americana – the Brooks Catsup bottle water tower. The 100,000-gallon water tower was built in 1949 and recently restored in 1995. The plant was constructed around 1891 and at that time was known as the Collinsville Canning and Packing Company.

No significant documented archeological finds have been located. Discussions with the Illinois Historic Preservation Agency have indicated that there doesn't appear to be any significant documented archeological findings to the east of the City. It is cautioned that a possibility of archeological areas of interest could exist though, especially along the Canteen Creek watershed area. Field investigations will be done as a part of the Phase I study to study to determine if any areas exist and if these areas can be avoided.

Portions of IL-159 that were previously designated US Route 40 are now part of the historic National Road which is designated as a National Scenic Byway. The National Scenic Byway program is part of the US Department of Transportation, Federal Highway Administration. The program is a grass-roots collaborative effort established to help recognize, preserve, and enhance selected roads throughout the United States. Certain roads are recognized as All-American or Nation Scenic Byways based on one or more archeological, cultural, historic, natural, recreational, and scenic qualities.

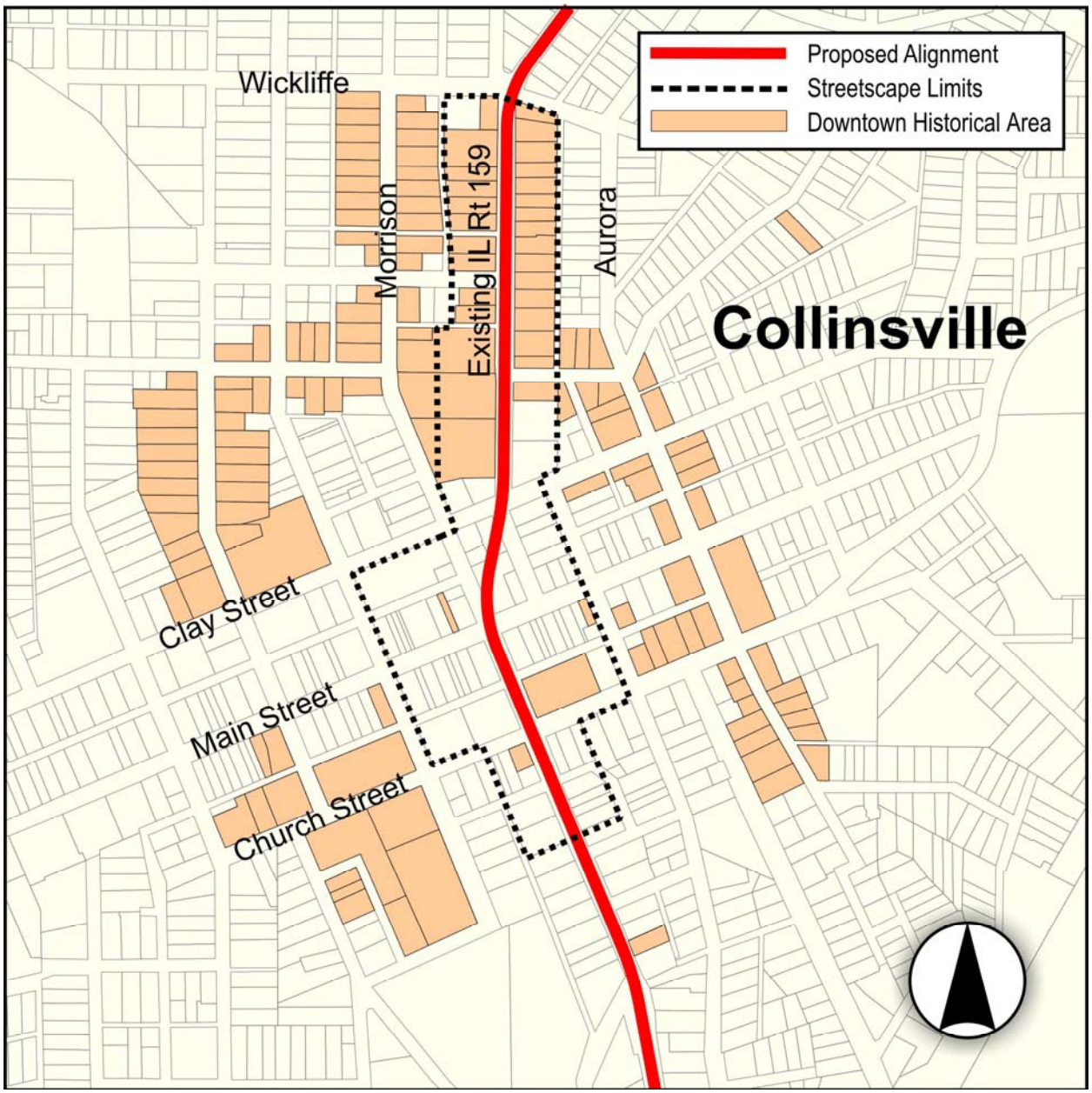


Figure 3-9- Historic District
(Sources: IHPA, Collinsville Historic Preservation Committee)

3.8.5 Special Waste Sites

An IEPA site currently being studied and included in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) is the former St. Louis Smelting and Refining Co. (Lead Smelter) site located in the Collinwood Subdivision area. From local interviews, the facility was located about where Lemon Tree Lane was constructed. It appears possible lead contamination covers a much broader area than just the immediate facility location though. Further studies and possible remediation efforts are being evaluated and discussed. The Illinois Environmental Protection Agency (IEPA) completed site inspection on September 25, 2003. The site is not listed on the EPA National Priority List (NPL).

Historic records show that a couple of brick factories and the Collinsville Zinc Company existed in the study area near Lebanon Road. The facilities were demolished but remains of buried refuse could exist. Any possible waste generated by these sites is not known.

Three sites along existing IL-159 have been identified by the IEPA as being Leaking Underground Storage Tank (LUST) sites and could impact future construction (see Figure 3-10):

1316 Vandalia St.
owner: Phillips 66 Convenience Store
description: intersection of Illinois Route 159 and Indiana Street

850 South Morrison Ave
owner: City of Collinsville
description: city of Collinsville maintenance facilities on the east side of Illinois Route 159 near Morrison

806 South Morrison Ave
owner: Joe Peila Estate property
description: area between Brooks Catsup site and the 4-0 Quick Shop

3.8.6 Endangered Species Locations

No recorded endangered species sites were identified in the research for this study. Since a significant portion of the study area included in the Canteen Creek watershed is forested, the potential exists for sites that include endangered or threatened species in that area. Further Phase I study will include an evaluation and identification of potential sites.

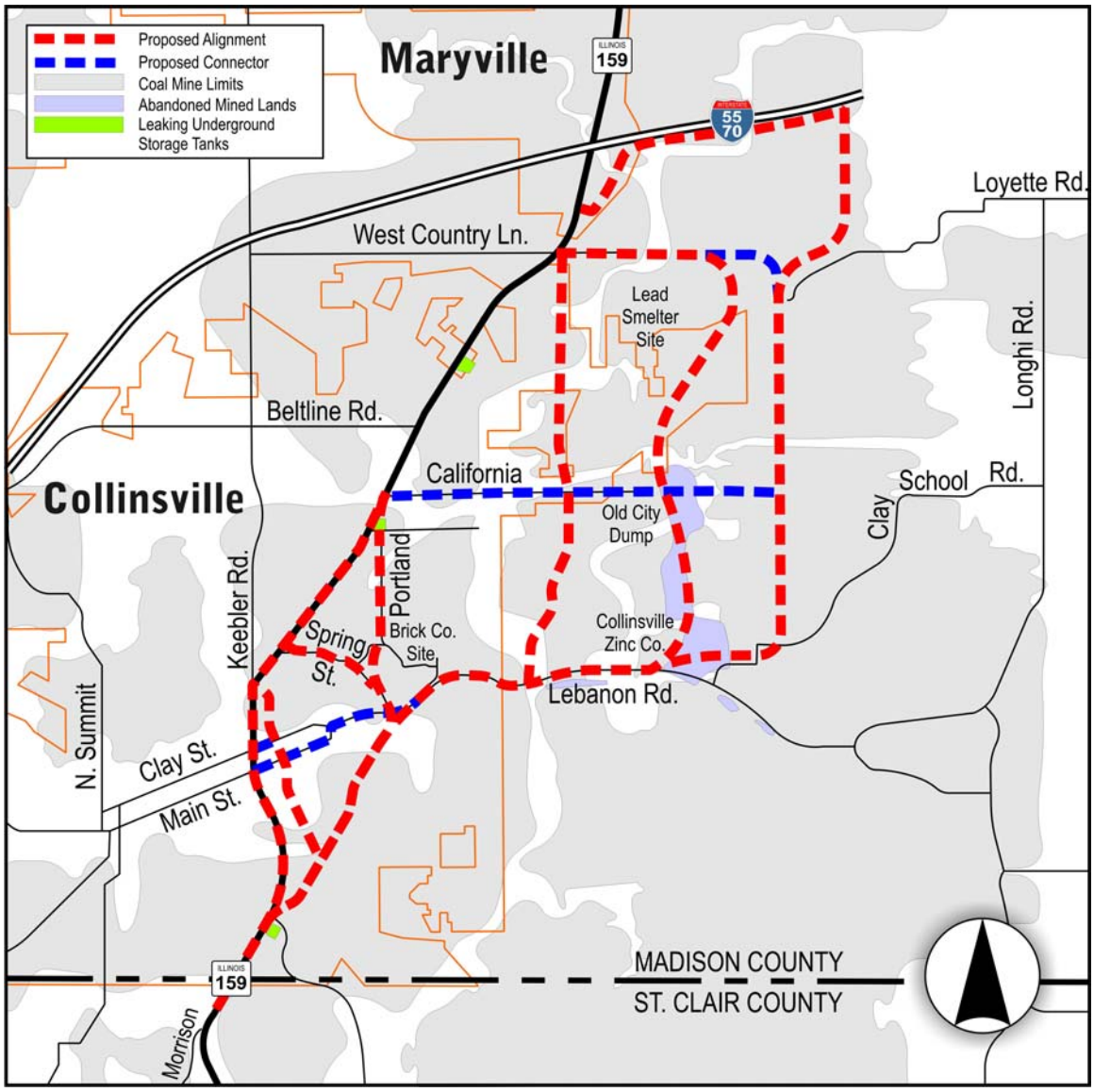


Figure 3-10
Special Waste, Undermined Coal Areas and Reclaimed Mine Sites
(Sources: IEPA, IDNR, AML)

3.8.7 Natural Features

The natural ground features of the area consist of rolling terrain that is dissected by small drainage ways with varying grades from nearly flat up to about 50%. The predominant soil types for the area are Fayette silty-loam and clays, Rozetta silty-loam and clays, and Orion silty-loam in the Canteen Creek bottoms. Characteristics of the Fayette and Rozetta soil types include slight to moderate erosion, low strength, and moderate shrinking and swelling. These soil types are formed in loess. Orion soil types are characterized as being flood plain type soils that are mostly wet, poorly drained soils formed in silty alluvium.

Areas east of Canteen Creek are a mix of farmland with some urbanization, although no large-scale farms exist in the study area. Several larger residential tracts of around five acres or more have emerged in the Clay School Road area. Coordination with the US Department of Agriculture, the Illinois Department of Agriculture, or the National Resources Conservation Service has not been done as part of this study and no determination of the impacts to prime farmlands has been considered.

Collinsville's history is synonymous with coal mining. As shown in Figure 3-10, nearly the entire City is undermined. The resulting mining underneath the ground surface can result in the settling or subsidence of the land. Record of recent mine subsidence exists along the existing IL-159 route in the area of the Son Life Church and school (formerly the Collinsville Township High School grounds).

In addition, two reclamation sites have been identified as a result of the mining. These sites are part of the long since abandoned Lumaghi mines. One is located just north of Clay School Road near the intersection with Lebanon Road. The other is in the same general area but just south of Lebanon Road.

4 ANALYSIS OF ALTERNATIVES

4.1. Attainment of Purpose and Need

Each alternative considered is described in Chapter 5, along with an analysis of the key evaluation features. A summary of why an alternative was recommended or rejected for further study is in Chapter 8. The evaluation was based on the alternative's ability to improve traffic flow and to provide continuity in roadway improvements currently being completed in the study area, enhance and support economic development and preserve and enhance the natural, historic, and cultural resources of the city.

4.2. Traffic Analysis

Traffic for each alternative was projected based on the existing traffic on IL-159 and on the traffic expected from future growth to the east. Existing annual daily traffic (2003 ADT) for existing IL-159 varies through the study area (see Table 4-1) from 24,100 vehicles north of the Beltline to 15,900 just south of the downtown area to 17,500 vehicles at the south edge of town near Morrison Avenue. Truck traffic increases from 900 near the Beltline to around 1100 just north of downtown to 475 at the south end of the city.

Table 4-1 Two-way Average Daily Traffic History

Location	1981	1986	1991	1996	2003
IL-159: South of Main	13,200	15,100	15,500	17,800	15,900
North of Clay	19,100	18,900	18,900	20,700	19,400
South of the Beltline	18,600	21,900	19,100	21,400	20,500
North of the Beltline	18,400	27,700	22,000	22,200	24,100
Other Major Routes: IL-255 - south of I-55/70	n/a	9,400	24,400	35,800	48,200
I-55/70 - just west of IL-159	20,800	25,700	29,600	33,900	46,700
Cross Streets: Beltline - IL-159 to Keebler	14,000	15,700	19,300	17,600	19,700
Morrison - near IL159	n/a	4550	5800	n/a	6,500
Lebanon Road - near Spring St.	n/a	2,150	2,000	2,200	4,050

(Source: IDOT Traffic Maps)

Traffic projections for the 20-year design horizon were calculated for existing IL-159 using current ADT's and an annual growth rate of 1.5%. In addition to this background growth, additional trips were estimated based on the assumption that most of the undeveloped area east of the current city limits would develop per the City Comprehensive Plan over the next twenty years.

About half of the 9 square-mile study area is already developed or can be considered undevelopable due to floodplain, wetlands, and difficult terrain. Assuming an average single-family residential site of 1-acre, which includes streets and infrastructure, this yields roughly 3,000 single-family dwellings. Estimating an average of 8 trips a day per household, as many as 11,000 trips could be added to the study area traffic after build-out.

Traffic was distributed between existing IL-159 and the alternatives, based on assumptions of travel time and proximity to each route. A summary of the traffic projections for each alternative is included in Table 4-2. A full copy of the traffic analysis is in Appendix C.

Table 4-2 – Projected 2025 Two-way Average Daily Traffic

	EXISTING OPTION	OPTIONS 1, 2, 3		OPTION 4		OPTION 5, 6	
		EX-159	ALT-159	EX-159	ALT-159	EX-159	ALT-159
IL-159: South of Morrison	23,438	24,236	0	24,640	0	24,704	0
South of Clinton	27,804	27,984	0	28,330	0	28,365	0
South of Church	26,211	14,467	11,924	16,341	10,396	17,278	9,495
South of Main	25,536	14,242	11,474	16,116	9,946	17,053	9,045
North of Clay	29,043	16,522	13,120	18,845	11,180	19,999	10,073
South of Beltline	30,502	31,101	0	19,866	11,618	21,093	10,438
North of Beltline	32,763	33,748	0	25,163	12,454	23,055	11,135
South of Frontage Rd	34,222	35,308	0	35,727	0	35,747	0
South of I-55/70	32,732	33,819	0	34,237	0	34,115	0
Cross Streets: Morrison near IL-159	9,674	9,056		8,998		8,969	
Main/Clay @ IL-159	19,317	18,899		18,861		18,849	
Beltline @ IL-159	25,284	24,703		24,636		24,595	
W. Country Ln. @ IL-159	3,669	3,481		3,458		3,441	

4.3. Engineering Analysis

The basic design criteria and typical section for each alternative are described in Chapter 5. Detailed horizontal and vertical alignments were not developed for this study, however, the evaluation in Chapter 5 indicates where specific alternatives would require special engineering considerations.

4.4. Social, Economic and Environmental Effects

For each alternative, a general evaluation of potential impacts is described in Chapter 5. These impacts are based on the general environmental information described in Chapter 3. Impacts are described at a general, comparative level, so that decisions can be made between alternatives. Impacts evaluated include:

- Socio-Economic- Relocations, Business, Residential, Urban preservation, City planning, Public services
- Cultural- Archeological, Historical, Schools/churches, 4(f) sites
- Environmental- Air, Noise, Water, Wetlands, Tree removal, Endangered species, Floodplain, Hazardous material, Abandoned mines

4.5. Cost Estimates

Construction costs for each alternative were estimated on a general per foot basis for each type of road segment, plus additional costs were added for significant items such as major stream crossings and traffic control. Costs for land acquisition were based on estimates of acres of right-of-way and numbers of buildings, and engineering costs were based on percentages of construction costs. A summary of costs by alternative is included in Table 4-3 below. Details of the costs estimates are included in Appendix D.

Table 4-3 – Cost Estimates
2004 Costs (in thousands of dollars)

SEGMENT OF PROJECT:	Existing Route	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
IL-159 Five Lanes	$17,000	$6,000	$5,000	$2,000	$2,000	$2,000	$2,000
IL-159 Overlay	$0	$4,000	$8,000	$6,000	$5,000	$5,000	$4,000
IL-159 Supplemental Route	$0	$5,000	$6,000	$10,000	$15,000	$15,000	$20,000
Lebanon Road Widening	$0	$0	$0	$0	$0	$5,000	$4,000
Other Local Street Improvements	$1,000	$1,000	$1,000	$1,000	$4,000	$7,000	$6,000
TOTAL	$18,000	$16,000	$20,000	$19,000	$26,000	$34,000	$36,000
ITEM OF WORK:	Existing Route	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Construction	$9,000	$10,000	$11,000	$9,000	$15,000	$24,000	$24,000
Engineering	$2,000	$2,000	$2,000	$2,000	$3,000	$4,000	$5,000
Right-of-Way/ Utilities	$7,000	$4,000	$7,000	$8,000	$8,000	$6,000	$7,000
TOTAL	$18,000	$16,000	$20,000	$19,000	$26,000	$34,000	$36,000

5. DESCRIPTION AND ANALYSIS OF ALTERNATIVES CONSIDERED

5.1. Design Guidelines

Since the purpose of a feasibility study is to evaluate whether further study is warranted and, if so, which alternatives warrant study, the alternatives defined in this study are approximate and subject to further refinement and evaluation during the Phase I Study. The primary goal of all alternatives is to accommodate the demand for between 25,000 and 30,000 vehicles per day, compared to the current two-lane capacity of about 14,000 vehicles per day.

The basic assumption for the "build" alternatives is that four travel lanes are required to carry the projected traffic in this corridor. The alternatives propose a combination of improvements to the existing route and the construction of a supplemental route to provide those four lanes. The following criteria were used for the existing route and the supplemental route:

5.1.1. Existing Route

Existing IL-159 is classified as a principal arterial. Where a five-lane section is needed, it is proposed that criteria be used to limit the impact on adjacent residences and businesses. The five lane typical section (see Figure 5-1) would include five 11' lanes, curb and gutter and sidewalk. Horizontal and vertical alignments will be designed for 30 mph in the downtown segment (Church Street to Wickliffe Avenue) and for 45 mph elsewhere. Little adjustment to the existing horizontal and vertical alignments is expected. Access will be maintained at current locations, although some non-conforming entrances may need to be adjusted.

In the immediate downtown area from Church Street to Wickliffe Avenue, special consideration should be given to accommodate the streetscape standards used for the adjacent portions of Main and Clay Streets. These features include textured crosswalks, decorative brick between the curb and sidewalk, street trees and tree grates, and decorative light and traffic signal poles. Consideration should also be given to eliminating left turn lanes at some intersections to avoid impacts on adjacent properties. Elimination of residential driveways in this segment, and improvement to the adjacent alleys for local access should also be considered. In conjunction with the streetscape theme, a boulevard type section with a grass median could be considered (see Figure 5-2).

Where a supplemental route is proposed, the portion of the existing route that is not currently five lanes will be improved to the standard three lane section for urban arterials, with three 12' lanes (See Figure 5-3). Horizontal and vertical alignments will be designed for 30 mph.

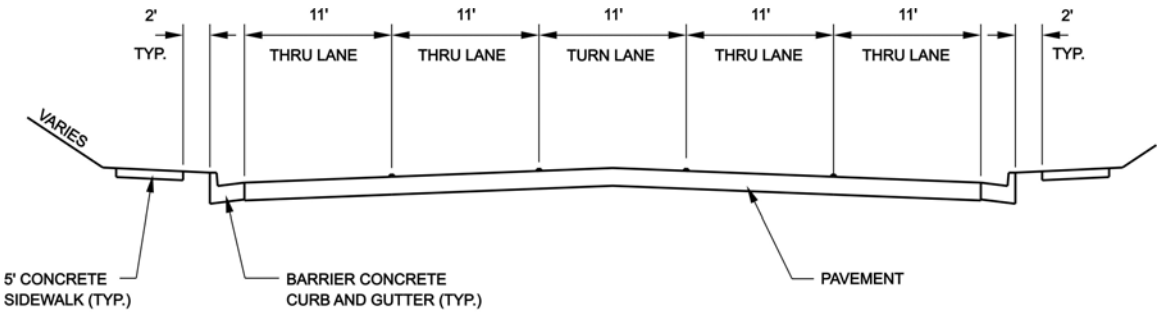


Figure 5-1 – Typical Section Five Lane Urban

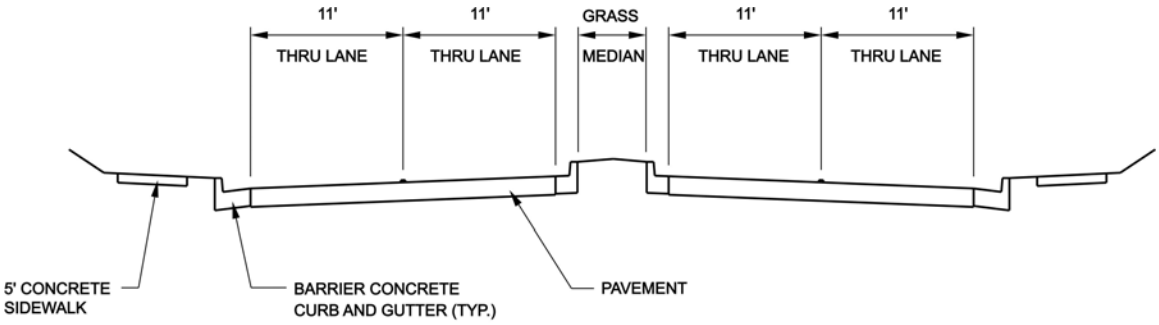


Figure 5-2 -Typical Section Urban Streetscape

5.1.2. Supplemental Route

The proposed supplemental route will be designed to urban arterial standards with three 12' lanes for the alternatives within the city limits. For sections outside of the city limits, rural arterial standards with three 12' lanes and 10' shoulders (see Figure 5-4) will be used. Horizontal and vertical alignments will be designed for 45 mph. Access will be limited to intersections with collector and local access streets.

5.2. Non-structural Alternatives

Several options for improving traffic flow and reducing congestion that do not require new highway construction were reviewed to meet the requirements for Phase I Reports.

5.2.1. Transportation Demand Strategies

Because the destinations for most of the traffic along IL-159 are dispersed throughout Madison and St. Clair Counties, it is very unlikely that any measures such as adjusted work schedules or school class times would have any impact on the demand in this corridor.

5.2.2. Mass Transit

As indicated in Chapter 3, several bus routes serve the portion of IL-159 in the study area. While increased bus services might alleviate traffic demand to a small degree, based on current use, it is unlikely that transit options would adequately address the congestion problems in this corridor. Accommodations for bus routes should be considered for any alternatives that are studied further in Phase I.

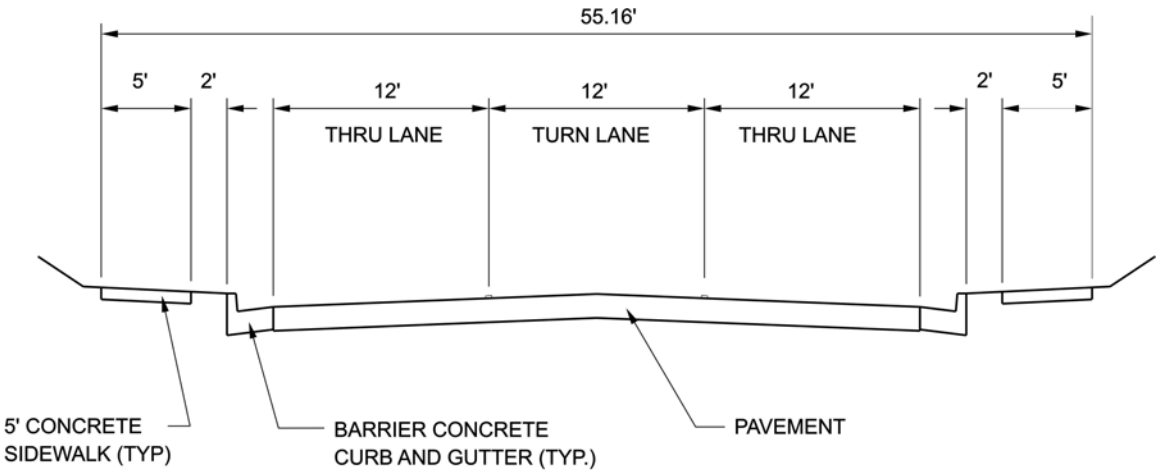


Figure 5-3 - Typical Section Three Lane Urban

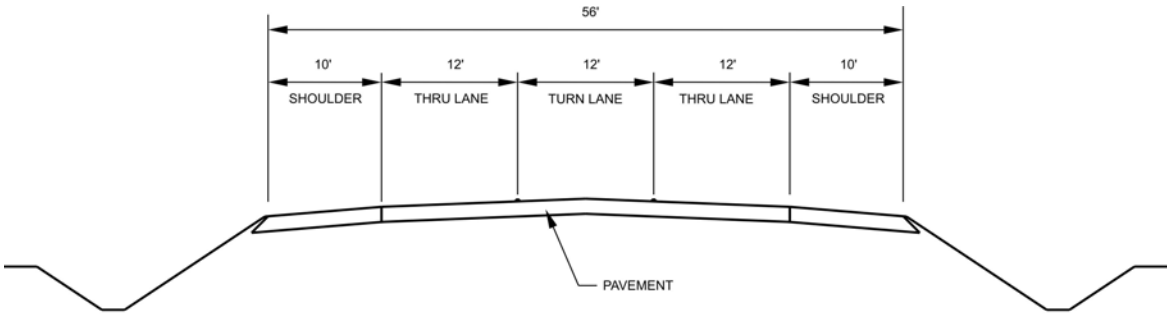


Figure 5-4 - Typical Section Three Lane Rural

5.3. No-Action Alternative

This alternative assumes that no improvements will be made to the corridor, other than regularly scheduled maintenance to preserve the route's functional use. Since the projected traffic demand on the current three-lane segment exceeds the capacity, even at a lower level of service, it is assumed that the excess demand will travel other routes in the corridor.

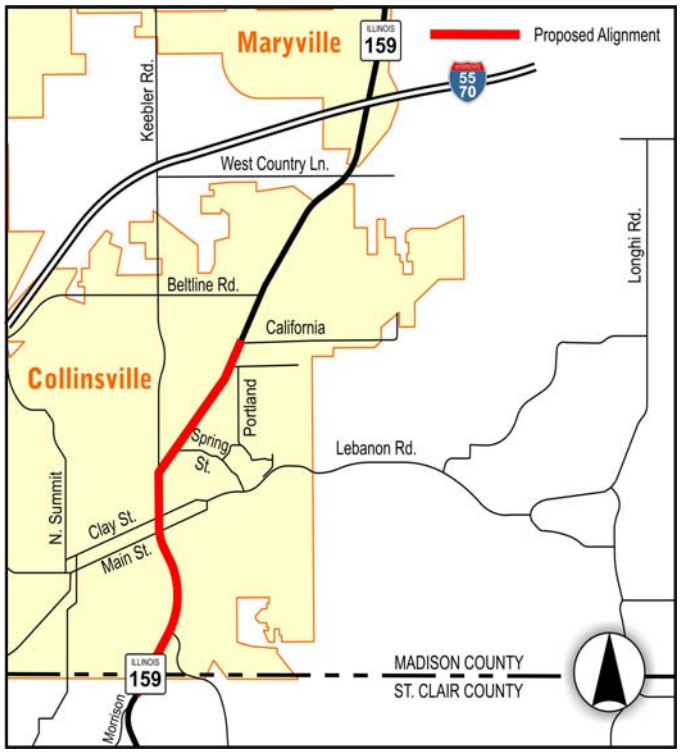
Transportation	
Traffic flow	maintains traffic flow along existing corridor, but level of service will decline and congestion will worsen
Traffic capacity	in the three-lane segment, traffic already exceeds design capacity; up to 10,000 of the projected 25,000 trips per day for year 2025 will divert to other routes
Travel time	at 20 mph average, through travel time is about 14 minutes
Travel distance	4.6 miles for study limits (Morrison Street to Country Lane)
Safety	does not improve several existing high accident locations
Mass transit	increased congestion will slow travel on bus routes
Pedestrian/bicycle	no improvements to current poor pedestrian and bicycle access
Construction	none
Project Cost	no cost for new construction
Socio-Economic	
Relocations	none
Business	increased congestion could impair access to businesses
Residential	increased congestion could impair access to driveways
Urban preservation	maintains traffic in the urban core
City planning	maintains/preserves existing zoning but does not address traffic demands in the City's planned growth area to the east
Public services	increased congestion would impact ambulance, fire, police
Cultural	
Archeological	none
Historical	none
Historic Route 66	none
Schools/churches	increased congestion could impair access to facilities
4(f) sites	none

Environmental

Air	air quality would deteriorate due to increased traffic congestion
Noise	noise levels could increase due to increased traffic congestion
Water	none
Wetlands	none
Tree removal	none
Endangered species	none
Floodplain	none
Hazardous material	two potential leaking underground storage tank sites have been identified along the corridor, a no-build alternative will not impact those sites
Abandoned mines	mines are prevalent under much of Collinsville with some prior subsidence activity at the Son Life Church site, a no-build alternative will not impact those areas.

5.4. Existing Route Alternative

The current traffic demand on IL-159 through Collinsville plus traffic expected from development to the east requires two travel lanes in each direction.



Improvement of the existing route would require a 5-lane section- with two travel lanes in each direction and a bi-directional turn lane for safety- from the existing 5-lane section near Morrison Street, north through town to the existing 5-lanes section at California Avenue. This option would improve traffic flow by realigning IL-159 at Clay and Main Streets to eliminate the 90-degree movements, along with reconstruction of several blocks of Clay and Main Streets. The segment from Church Street to Wickliffe Street would be improved with current "streetscape" features consistent with those used on Main Street.

Transportation

Traffic flow	maintains existing route, improves flow through the Clay/Main Street intersections
Traffic capacity	5-lane section provides for existing traffic of 20,000 trips per day and for year 2025 traffic at 25,200 trips per day
Travel time	at 35 mph average, through travel time is about 8 minutes
Travel distance	4.6 miles for study limits (Morrison Street to Country Lane)
Safety	improves alignment and lane widths at several existing high accident locations within the 3-lane section of the downtown area
Mass transit	transit routes on IL-159 will be improved with wider turning radii at intersecting streets and shorter travel time
Pedestrian/bicycle	Pedestrian travel will be improved with new sidewalks with handicap accessibility
Construction	maintenance of traffic during construction would impair traffic flow on IL-159, potentially increasing traffic on neighboring streets
Project Cost	$18 million

Socio-Economic

Relocations	less than 10 expected, mostly businesses that are very close to the existing road in the Church Street to Wickliffe Street segment
Business	maintains traffic flow along existing commercial corridor
Residential	roadway widening may encroach on residential properties in the Clay Street to Wickliffe Street segment
Urban preservation	maintains traffic in the urban core
City planning	maintains/preserves existing zoning but does not address traffic demands in the City's planned growth area to the east
Public services	improvements support public service (ambulance, fire, police)

Cultural

Archeological	no sites identified on this route
Historical	potential impact to historical features in the segment from Church Street to Wickliffe Street
Historic Route 66	no changes in route location are planned, streetscape features could enhance the route in the downtown area
Schools/churches	potential minor impacts to First United Presbyterian Church, St. Peter and Paul Catholic Church, and Son Life Church due to widening
4(f) sites	no sites identified on this route

Environmental

Air	air quality would improve due to the reduction in traffic congestion
Noise	noise levels should remain similar, with some minor increase in the residential segment from Clay Street to Wickliffe Street
Water	additional storm water runoff due to additional pavement will be accommodated in the storm sewer design
Wetlands	no sites identified on this route
Tree removal	limited tree removal on the existing route- any trees removed will be replaced within the existing corridor
Endangered species	no habitat identified on this route
Floodplain	no floodplains identified on this route
Hazardous material	two potential leaking underground storage tank sites have been identified along the corridor
Abandoned mines	mines are prevalent under much of Collinsville. There is a history of some prior subsidence activity in the Son Life Church area

5.5. Supplemental Route Alternatives

Six corridors that provide supplemental lanes of traffic were studied (see Figure 5-5). Options 1-3 deal with providing supplemental traffic specifically in the downtown area, which is essentially delineated by Morrison Street on the south and California Street on the north. Options 4-6 are routes that progress further to the east and basically look at supplementing IL-159 from Morrison Street on the south to about Country Lane on the north.

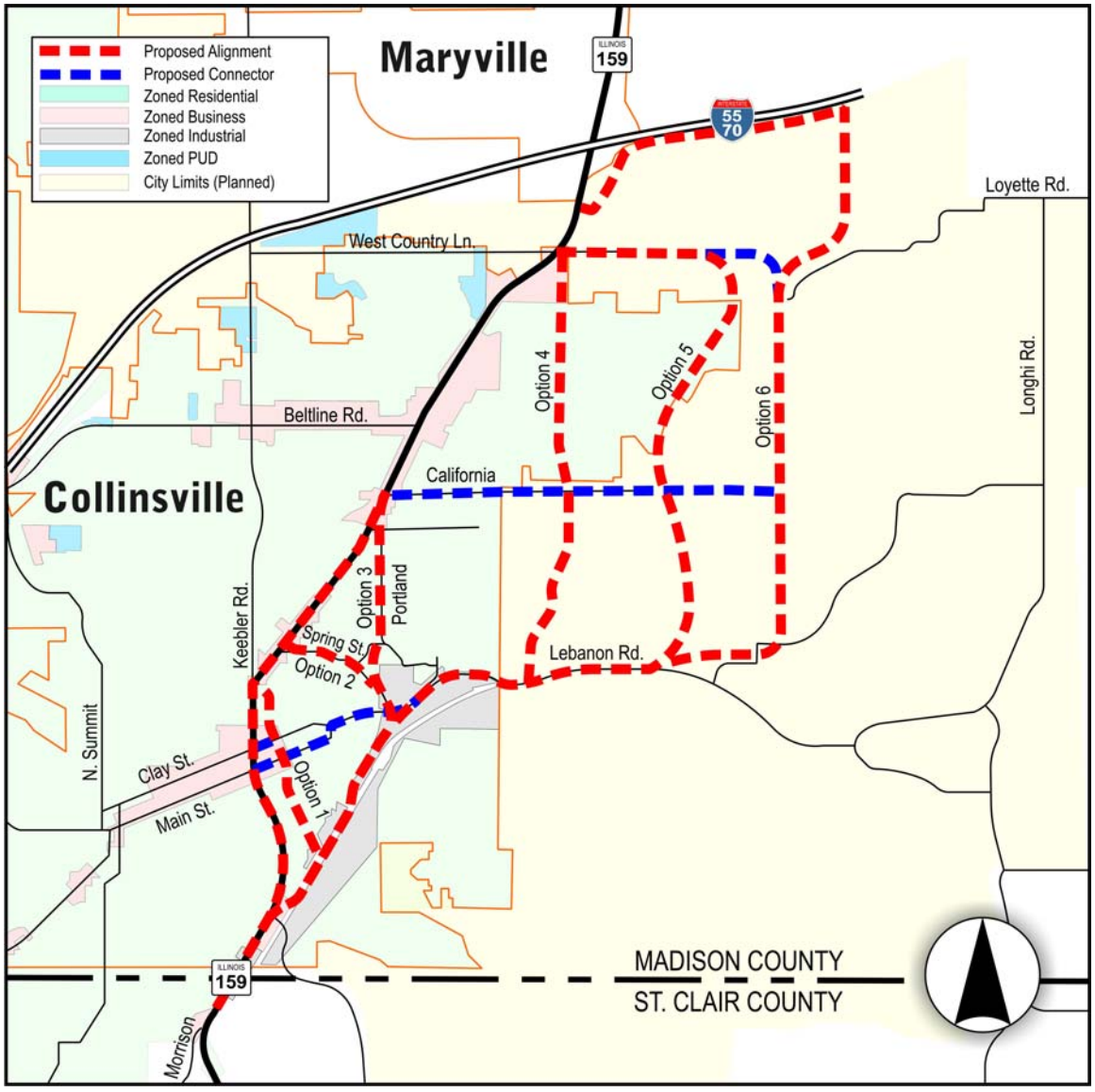
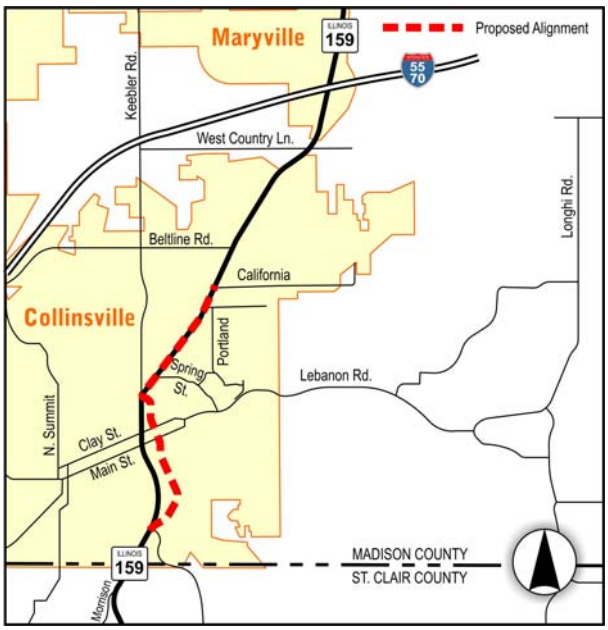


Figure 5-5 - Route Options

5.5.1. Option 1 – Aurora Street Alignment

To avoid the impacts of adding travel lanes in the segment from Church Street to Wickliffe Street, this option includes a new 3-lane parallel route. A new 5-lane section would be built from the existing 5-lane section near Morrison Street north to about Chestnut Street. From there, a new 3-lane section- with streetscape features to reduce residential impact- would follow Reed Avenue then Aurora Street to the Wickliffe Street/IL-159 intersection. A new 5-lane section would be built on existing IL-159 returning to the existing 5-lane section near California Street. The existing IL-159 segment from Church Street to Wickliffe Street would also be rehabilitated in this option.



Transportation

Traffic flow	maintains traffic flow along existing corridor, with a segment of diversion within two blocks of the existing route
Traffic capacity	supplemental 3-lane section helps to support existing traffic at 20,000 trips per day and 25,200 trips per day for year 2025
Travel time	at 35 mph average, through travel time is about 8 minutes
Travel distance	4.6 miles for study limits (Morrison Street to Country Lane)
Safety	improves alignment and lane widths at several existing high accident locations within the 3-lane section of the downtown area
Mass transit	transit routes on IL-159 will be improved with wider turning radii at intersecting streets and shorter travel time
Pedestrian/bicycle	Pedestrian travel will be improved with new sidewalks with handicap accessibility. Some traffic will be rerouted from the downtown area resulting in improved pedestrian mobility
Construction	maintenance of traffic during construction would impair traffic flow on IL-159, Reed and Aurora Streets would be closed for construction
Project Cost	$16 million

Socio-Economic

Relocations	potentially as many as 50 residential relocations along Reed and Aurora Streets, along with 2 businesses that are very close to the existing road at the IL-159/Wickliffe Street intersection
Business	maintains/improves traffic flow along or near the existing commercial corridor
Residential	significant change in traffic along the Reed and Aurora Street segment
Urban preservation	maintains traffic in the urban core
City planning	maintains/preserves existing zoning but does not address traffic demands in the City's planned growth area to the east
Public services	improvements support public service (ambulance, fire, police)

Cultural

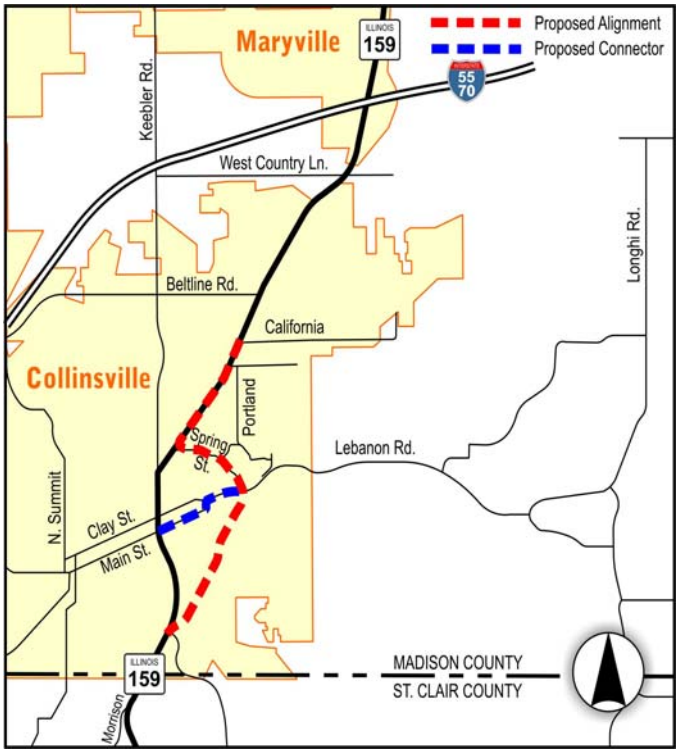
Archeological	no sites identified on this route
Historical	potential impact to historical features in the Aurora Street segment
Historic Route 66	no changes in route location are planned, streetscape features could enhance the route in the downtown area
Schools/churches	potential minor impacts to First United Presbyterian Church and Son Life Church due to widening
4(f) sites	no sites identified on this route

Environmental

Air	air quality would improve due to the reduction in traffic congestion
Noise	noise levels should remain similar along the existing route, increases in noise levels are expected along Aurora and Reed Streets
Water	additional storm water runoff due to additional pavement will be accommodated in the storm sewer design
Wetlands	no sites identified on this route
Tree removal	limited tree removal on the existing route- any trees removed will be replaced within the existing corridor
Endangered species	no habitat identified on this route
Floodplain	no floodplains identified on this route
Hazardous material	two potential leaking underground storage tank sites have been identified along the corridor
Abandoned mines	mines are prevalent under much of Collinsville with some prior subsidence activity at the Son Life Church site

5.5.2. Option 2 – Spring Street Alignment

Option 2 includes a new 3-lane parallel route situated further east than Option 1. This option supplements existing IL-159 to avoid the impacts of widening and/or adding travel lanes in the downtown segment. A new 5-lane section would be built from the existing 5-lanes near Morrison Street north to about Chestnut Street. From there, a new 3-lane section- with streetscape features to reduce residential impacts- would follow the west side of CSXT railroad. The route continues north on Blackjack Road to Spring Street, then west on Spring Street to existing IL-159. IL-159 would be widened to 5-lanes from Spring Street to the existing 5-lanes near California Street. The existing IL-159 segment from Church Street to Wickliffe would also be rehabilitated in this option.



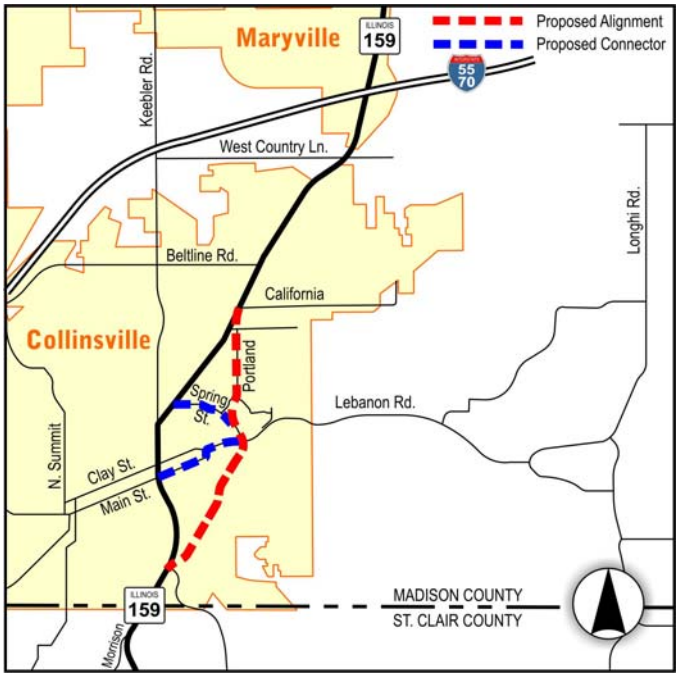
Transportation

Traffic flow	maintains traffic flow for much of the existing corridor but provides a segment rerouting through traffic around the downtown area
Traffic capacity	supplemental 3-lane section helps to support an existing traffic of 20,000 trips per day and 25,200 trips per day for year 2025 traffic
Travel time	at 35 mph average, through travel time is about 8 minutes
Travel distance	4.7 miles for study limits (Morrison Street to Country Lane)
Safety	improves alignment and lane widths at several existing high accident locations within the 3-lane section of the downtown area
Mass transit	transit routes on IL-159 will be improved with wider turning radii at intersecting streets and shorter travel time
Pedestrian/bicycle	Pedestrian travel will be improved with new sidewalks having handicap accessibility. Future bicycle accommodations will be analyzed
Construction	maintenance of traffic during construction would impair traffic flow on IL-159. Blackjack Road and Spring Street would be closed for construction
Project Cost	$20 million

Socio-Economic	
Relocations	potentially 50 residences along Blackjack Road and Spring Street as well as businesses at the Reed Avenue/Railroad Avenue intersection and the Spring Street/existing IL-159 intersection
Business	maintains/improves traffic flow along or most of existing commercial corridor
Residential	significant change in traffic along the Blackjack Road and Spring Street segments
Urban preservation	keeps traffic near the urban core
City planning	maintains/preserves existing zoning but does not address traffic demands in the City's planned growth area to the east
Public services	improvements support public service (ambulance, fire, police)
Cultural	
Archeological	no sites identified on this route
Historical	no sites identified on this route
Historic Route 66	no changes in route location are planned, streetscape features could enhance the route in the downtown area
Schools/ churches	potential minor impacts to the Son Life Church due to widening
4(f) sites	no sites identified on this route
Environmental	
Air	air quality would improve due to the reduction in traffic congestion
Noise	noise levels should remain similar along the existing route, increases in noise levels would occur along Blackjack Road and Spring Street
Water	additional storm water runoff due to additional pavement will be accommodated in the storm sewer design
Wetlands	no sites identified on this route
Tree removal	limited tree removal on the existing route- any trees removed will be replaced within the existing corridor
Endangered species	no habitat identified on this route
Floodplain	the Canteen Creek floodplain could be impacted near the Blackjack Road and Lebanon Road areas
Hazardous material	two potential leaking underground storage tank sites have been identified along this corridor
Abandoned mines	mines are prevalent under much of Collinsville with some subsidence experienced at various locations

5.5.3. Option 3 – Portland Street Alignment

This option minimizes widening to the existing route while providing the most direct route around downtown. A new 5-lane section would be built from the existing 5-lane section near Morrison Street north to about Chestnut Street. From there, a new 3-lane section would begin along the west side of the CSXT railroad. The route would continue north along Blackjack Road, then along a portion of Spring Street to Portland Street. The route would tie into existing IL-159 near the Indiana Avenue/IL-159 intersection. Improvements to existing IL-159 would be made to tie into the existing 5-lane section near California Street. Improvements would be made to Spring and Main Streets as part of the improvements.



Transportation

Traffic flow	maintains traffic flow along much of the existing corridor while providing a more direct route for through traffic
Traffic capacity	supplemental 3-lane section helps support an existing traffic of 20,000 trips per day and 25,200 trips per day for the year 2025 traffic
Travel time	at 35 mph average, through travel time is around 8 minutes
Travel distance	4.6 miles for study limits (Morrison Street to Country Lane)
Safety	improves alignment and lane widths at several existing high accident locations within the 3-lane section of the downtown area
Mass transit	transit routes on IL-159 will be improved with wider turning radii at intersecting streets and shorter travel time
Pedestrian/bicycle	Pedestrian travel will be improved with new sidewalks having handicap accessibility. Future bicycle accommodations will be analyzed
Construction	maintenance of traffic during construction would impair traffic flow on IL-159 and Indiana Avenue. Blackjack Road, Portland Street, and Spring Street would have to be closed
Project Cost	$19 million

Socio-Economic

Relocations	potentially 60 residences along Portland Street and Blackjack Road as well as businesses near the Reed Avenue/Railroad Avenue intersection and the Indiana Avenue/IL-159 intersection.
Business	maintains/improves traffic flow near the existing commercial corridor.
Urban preservation	keeps traffic near the urban core
City planning	maintains/preserves existing zoning but does not address traffic demands in the City's planned growth area to the east
Public services	improvements support public service (ambulance, fire, police)

Cultural

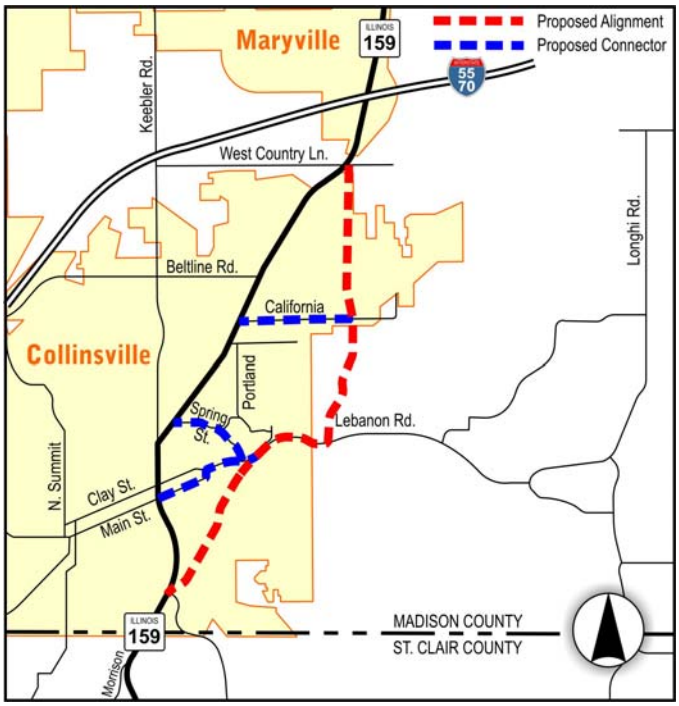
Archeological	no sites identified on this route
Historical	no sites identified on this route
Historical Route 66	no changes in route location are planned
Schools/ churches	no impacts are anticipated
4(f) sites	no sites identified on this route

Environmental

Air	air quality would improve due to the reduction in traffic congestion
Noise	noise levels should remain similar along the existing route, increases in noise levels are expected along Blackjack Road, Spring and Portland Streets
Water	additional storm water runoff due to additional pavement will be accommodated in the storm sewer design
Wetlands	no sites identified on this route
Tree removal	limited tree removal on the existing route- any trees removed will be replaced within the existing corridor
Endangered species	no impacts are anticipated
Floodplain	the Canteen Creek floodplain could be impacted in the Blackjack Road and Lebanon Road areas
Hazardous material	two potential leaking underground storage tank sites have been identified along the corridor. Also, a brick factory existed near Portland Street but its impacts are not known
Abandoned mines	mines are prevalent under much of Collinsville with some subsidence experienced at various locations

5.5.4. Option 4 – Collinwood Alignment

A new 5-lane section would be built from the existing 5-lane section near Morrison Street north to about Chestnut Street. From there, a new 3-lane section would travel along the west side of the CSXT railroad. The corridor would continue north along Blackjack Road to Lebanon Road, then east on Lebanon Road to about Barberis Lane. The route would then turn north on Barberis Lane and continue north to Leland Avenue, then north through Collinwood and Pine Lake Subdivisions on Adams Street. The alignment would end at the Country Lane/IL-159 intersection. Improvements would be made to Main, Spring, and California Streets as part of the project.



Transportation

Traffic flow	provides a through route bypassing the existing route
Traffic capacity	supplemental 3-lane section helps support existing traffic of 20,000 trips per day and for year 2025 traffic of 25,200 trips per day
Travel time	at 35 mph average, through travel time is about 8 minutes
Travel Distance	4.6 miles for study limits (Morrison Street to Country Lane)
Safety	improves alignment and lane widths at several existing high accident locations within the 3-lane section of the downtown area
Mass transit	transit routes on IL-159 will be improved with wider turning radii at intersecting streets and shorter travel time
Pedestrian/ bicycle	Pedestrian travel will be improved along the new route with the addition of new sidewalks with handicap accessibility. Some traffic will be rerouted from the downtown area resulting in improved pedestrian mobility
Construction	maintenance of traffic during construction would impair traffic flow on IL-159, Lebanon Road, California Street, Pine Lake Road, and Lester Avenue. Blackjack Road, Barberis Lane, Leland Avenue, and Adams Street would be closed for construction
Project Cost	$26 million

Socio-Economic

Relocations	potentially 60 residences along Blackjack Road, Barberis Lane, Leland Avenue, Collinwood and Pine Lake Subdivisions, and Adams Street
Business	routes traffic away from existing business corridor
Residential	significant change in traffic on local streets along route
Urban preservation	while moving further east, it still keeps traffic near the developed core
City planning	maintains existing zoning but does not address traffic demands in the City's planned growth area to the east
Public services	improvements support public service (ambulance, fire, police)

Cultural

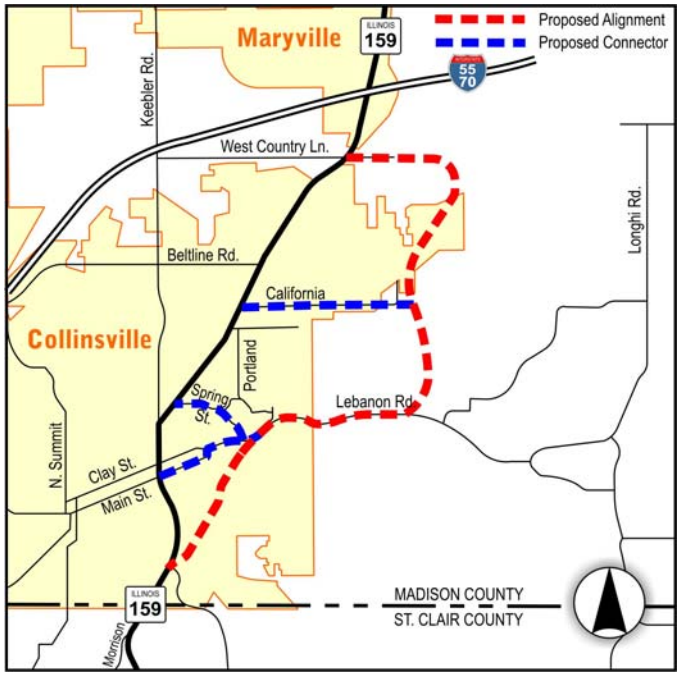
Archeological	no sites identified on this route
Historical	no sites identified on this route
Historical Route 66	no changes in route location are planned
Schools/ churches	no impacts are anticipated
4(f) Sites	corridor could affect Lakeview Cemetery; Woodland and Glidden Parks are near the corridor

Environmental

Air	air quality should improve due to the reduction in traffic congestion
Noise	noise levels should remain similar along the existing route, increases in noise levels would occur along Blackjack Road, Barberis Lane, Leland Avenue, and Adams Street as well as the subdivisions neighboring these locations
Water	additional storm water runoff due to additional pavement will be accommodated in the storm sewer design
Wetlands	no sited identified on this route
Tree removal	limited tree removal on the existing route- any trees removed will be replaced within the existing corridor
Endangered species	no habitat identified on this route
Floodplain	the Canteen Creek floodplain could be impacted near the Blackjack Road and Lebanon Road areas
*Hazardous materia*l	a potential leaking underground storage tank site has been identified along this corridor. The alignment also passes through a former lead smelter site in the Collinwood Subdivision area
Abandoned mines	mines are prevalent under much of Collinsville with some subsidence experienced at various locations

5.5.5. Option 5 – Canteen Creek Alignment

This option avoids impacts in the urbanized area. A new 5-lane section would be built from the existing 5-lane section near Morrison Street north to about Chestnut Street. From there, a new 3-lane section would run along the west side of the CSXT railroad. The corridor would continue north along Blackjack Road to Lebanon Road, then east on Lebanon Road to the east side of Canteen Creek. The corridor would then continue in a northerly direction paralleling Canteen Creek to Country Lane. The route would then travel west on Country Lane to existing IL-159. Improvements to Main, Spring, and California Streets would be included in the project.



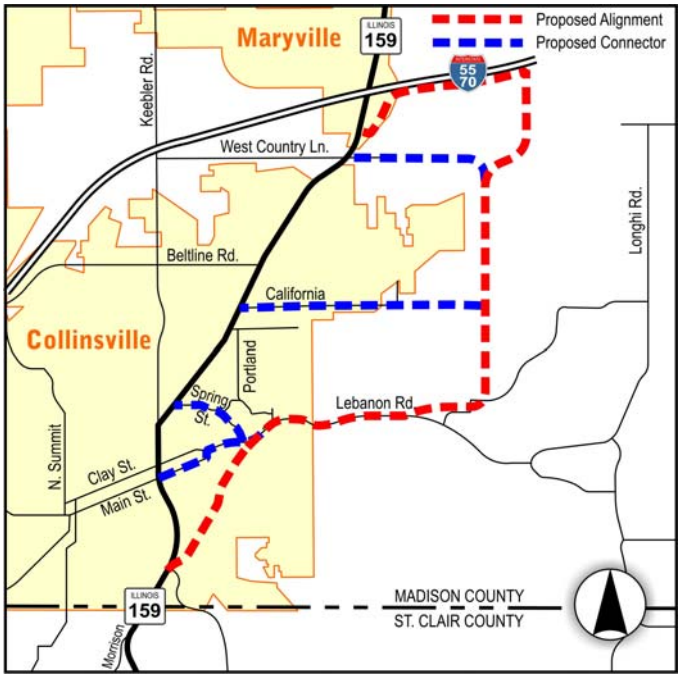
Transportation

Traffic flow	provides an alternate route through much of the IL-159 corridor
Traffic capacity	supplemental 3-lane section provides for existing traffic of 20,000 trips per day and for year 2025 traffic of 25,200 trips per day
Travel time	at 35 mph average, through traffic time is about 9 minutes
Travel distance	5.2 miles for study limits (Morrison Street to Country Lane)
Safety	helps to relieve some congestion of the existing route
Mass transit	no impacts are anticipated
Pedestrian/ bicycle	Pedestrian travel will be improved with new sidewalks with handicap accessibility. Some traffic will be rerouted from the downtown area resulting in improved pedestrian mobility
Construction	maintenance of traffic during construction would impair traffic flow on IL-159. Blackjack Road, Lebanon Road, and Country Lane would be closed for construction
Project Costs	$34 million

Socio-Economic	
Relocations	potentially as many as 20 homes along Blackjack Road and Country Lane may be necessary
Business	although most of the businesses along the existing IL-159 corridor have a destination driven consumer base, there could be some impacts from the traffic being redirected
Residential	new corridor would take traffic away from existing residential areas
Urban preservation	moves the traffic corridor further away from the downtown area
City planning	aids in planned eastward expansion of the city
Public services	provides emergency access to the east
Cultural	
Archeological	no sites identified on this route
Historic	no sites identified on this route
Historical Route 66	no changes in route location are planned
Schools/churches	no sites identified on this route
4(f) Sites	no sites identified on this route
Environmental	
Air	air quality should improve due to the reduction in traffic congestion
Noise	noise levels should remain similar along the existing route, increases in noise levels would occur along Country Lane, Blackjack Road, and Lebanon Road
Water	additional storm water runoff due to additional pavement will be accommodated in either ditching or storm sewer design
Wetlands	several stream crossings are required. As a result, wetlands would be impacted
Tree removal	tree removal is expected at all stream crossings
Endangered species	could be impacted along the Canteen Creek watershed
Floodplain	several stream crossings are required along Canteen Creek
Hazardous material	a potential leaking underground storage tank site has been identified along this corridor
Abandoned mines	mines are prevalent under much of Collinsville with some subsidence experienced at various locations. Abandoned coal mine “gob pile” sites could remain along this option

5.5.6. Option 6 – Outer Belt Alignment

This option avoids impacts in the urbanized area and along Canteen Creek. A new 5-lane section would be built from the existing 5-lane section near Morrison Street north to about Chestnut Street. From there, a new 3-lane section would begin along the west side of the CSXT railroad. The corridor would continue north along Blackjack Road to Lebanon Road, then east on Lebanon Road to near Clay School Road, then north to meet the extended Country Lane. The route would then travel west on Country Lane or the frontage road to existing IL-159. Improvements would be made to Main, Spring, and California Streets as part of the project.



Transportation

Traffic flow	provides an alternate route through much of the IL-159 corridor
Traffic capacity	supplemental 3-lane route provides for existing traffic of 20,000 trips per day and for year 2025 traffic at 25,200 trips per day
Travel time	at 35 mph average, through travel time is about 10 minutes
Travel distance	5.6 miles for study limits (Morrison Street to Country Lane)
Safety	helps to relieve some congestion of the existing route
Mass Transit	no impacts are anticipated
Pedestrian/ bicycle	Pedestrian travel will be improved with new sidewalks with handicap accessibility. Some traffic will be rerouted from the downtown area resulting in improved pedestrian mobility
Construction	maintenance of traffic during construction would impair traffic flow on IL-159. Blackjack Road, Lebanon Road, and Country Lane would be closed for construction
Project Costs	$36 million

Socio-Economic	
Relocation	potentially as many as 20 along Blackjack Road and Country Lane may be necessary
Business	although most of the businesses along the existing IL-159 corridor have a destination driven consumer base, there could be some impacts from the traffic being redirected.
Residential	new corridor would reduce traffic in existing residential areas
Urban preservation	moves the traffic corridor further away from the downtown area
City planning	aids in planned eastward expansion of the city
Public services	provides emergency access to the east
Cultural	
Archeological	no sites identified on this route
Historical	no sites identified on this route
Historical Route 66	no changes in route location are planned
Schools/ churches	no sites identified on this route
4(f) Sites	no sites identified on this route
Environmental	
Air	air pollution should be reduced due to traffic congestion being reduced
Noise	noise levels should remain similar along the existing route, significant changes to noise levels would occur along Country Lane, Blackjack Road, and Lebanon Road
Water	additional storm water runoff due to additional pavement will be accommodated in either ditching or storm sewer design
Wetlands	impacts to wetlands are expected at all stream crossings
Tree removal	tree removal is expected at all stream crossings
Endangered species	could be impacted along the Canteen Creek watershed
Floodplain	several stream crossings are needed along Canteen Creek
Hazardous material	at least one potential leaking underground storage tank has been identified along this corridor
Abandoned mines	coal mines are prevalent under much of Collinsville with some subsidence experienced at various locations. Abandoned coal mine “gob pile” remediation sites exist along Lebanon Road and Clay School Road

COORDINATION ACTIVITIES

In order to coordinate the evaluation of alternatives, presentations were made to elected officials and appointed committees/commissions to elicit input and support for the corridor and to community groups to evaluate and respond to their concerns. The following presentations were made (see Appendix E for minutes of meetings and handouts):

- January 6- Coordination with City Development Committee
- February 4- Letter regarding Public Meeting to local agencies
- February 20- Meeting with IDOT planning and design staff
- March 23- Coordination with City Development Committee
- April 6- Presentation to Collinsville Chamber of Commerce
- April 12- Presentation to Collinsville City Council
- April 15- Presentation to Collinsville Planning Commission
- April 19- Presentation to Downtown Collinsville, Inc.
- April 20- Meeting with IDOT District Engineer and staff
- May 4- Coordination meeting with Collinsville Township
- May 7- Presentation to Collinsville Economic Development Commission
- May 19- Presentation to Collinsville Township Board
- June 21- Meeting with IDOT planning and design staff
- June 28- Presentation to Collinsville City Council
- July 12– Vote on resolution

Comment letters on the project were received from several groups and are included in Appendix E. These include letters of endorsement for the recommended alternatives by the Collinsville Economic Development Commission, the Collinsville Plan Commission, the Collinsville Chamber of Commerce and Collinsville Progress. Downtown Collinsville, Inc. sent a letter with comments and concerns regarding several potential design features, but without a specific endorsement. Collinsville Township sent a letter supporting improvements on the existing route, but opposing any outer route.

6. PUBLIC INVOLVEMENT

Since public acceptance of a project is critical, information on the study was presented to the general public through public informational meetings and press releases. The first, pre-study informational meeting was held on February 17, 2004, at the Collinsville Township Senior Center, which is in close proximity to the route. Thirty people signed in at this meeting, with seven submitting comment forms. Public comment forms from the meeting are included in Appendix F.

A second public informational meeting was held on May 19, 2004, at the same location, to present the draft results from the study. One hundred thirteen people signed in at this meeting with thirty-five comment forms having been received to date. Public comment forms from the meeting are included in Appendix F.

Public response was allowed after the presentation in the June 28, 2004 Council Workshop. A record of that comment is included with the Workshop presentation in Appendix E. In addition, a petition supporting the existing route and opposing the outer routes was delivered immediately before the Council Workshop. While this petition has not been analyzed in detail, it should be noted that of the approximately 1,000 signatures, a number are completely illegible, and a significant number are outside the study area- many from outside Madison County. A copy of the petition is in Appendix F.

The study has also been covered in the local newspapers. Copies of relevant articles are included in Appendix G.

7. RECOMMENDATIONS

The purpose of this Feasibility Study is to determine whether improvements to the existing route are feasible and, if so, to recommend alternatives for improvements with further study. Recommendations are based on the analysis included in this report in addition to input received at meetings with the City staff and Council, affected public agencies and other community groups and comments received from the public in writing and at two public informational meetings.

8.1. Recommended Alternatives

Based on the need for additional traffic capacity along the IL-159 corridor, it is recommended that IDOT be requested to complete a more detailed Phase I environmental and engineering study of alternatives to improve IL-159. Due to the complexity of the corridor, the number of alternatives available and the varied benefits from these alternatives, it is difficult to recommend only one alternative at this time, without the more in-depth evaluation required in the full Phase I process.

It is therefore recommended that the following two alternatives be considered (see Figure 8-1):

8.1.1. Existing Route Alternative

This alternative includes widening the existing route to five lanes from Morrison Avenue to Church Street and from Wickliffe Avenue to California Avenue. In the immediate downtown area, between Church Street and Wickliffe Avenue, special consideration should be given to accommodate the streetscape standards used for the adjacent portions of Main and Clay Streets and to eliminating left turn lanes at some intersections to avoid impacts on adjacent properties.

8.1.2. Option 6 – Outer Belt Alignment

This alternative includes widening the existing route to five lanes from Morrison Avenue to about Chestnut Street. From there, a new three lane supplemental route would continue north along Blackjack Road to Lebanon Road, then east on Lebanon Road to near Clay School Road, then north and west to East Country Lane. Improvements would be made to Main Street, Spring Street, and California Avenue to provide east- west connections to the existing route to allow traffic distribution.

This alternative also includes improvements to the existing section of IL-159 from Main Street to Clay Street to eliminate the current right angle turns for through traffic, and from Clay Street to California Avenue to rehabilitate the route for an expected jurisdictional transfer to the City.

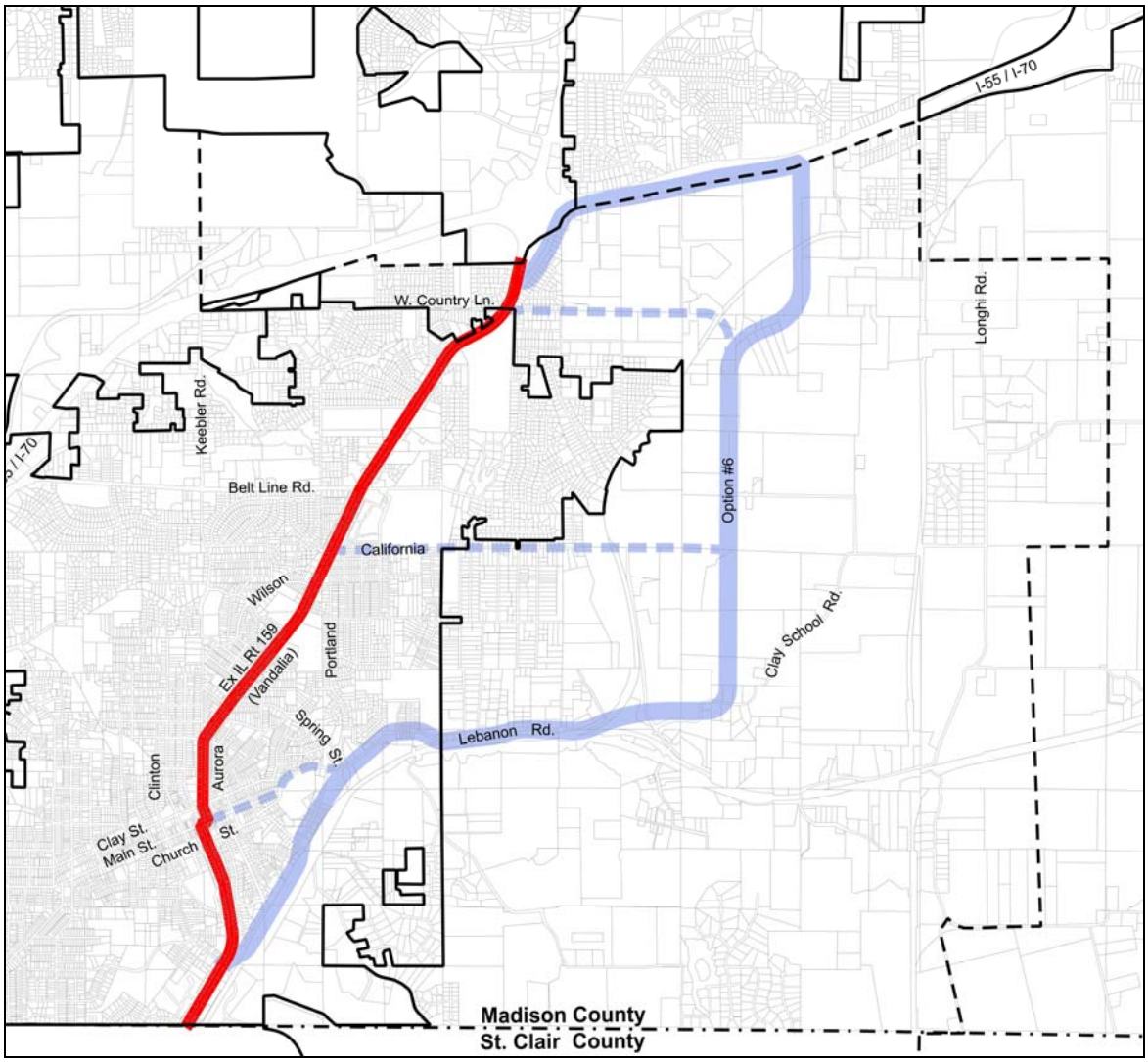


Figure 8-1 – Recommended Alternatives

Two "sub-options" were identified during public involvement, both of which warrant further study in Phase I. First, at the south end of the project, the five-lane section would extend to Main Street, and Main Street would be improved and used as the connection to the supplemental route to the east.

At the north end of the project, instead of turning west to connect to East Country Lane, the supplemental route would continue north to the Interstate 55 frontage road. The frontage road would also then be improved west to the IL-159 intersection.

8.2. Supporting Reasons for Recommendations

A summary of the advantages and disadvantages for each alternative described in Chapter 5, along with the recommendation for each alternative follows:

8.2.1. Transportation Demand Strategies

Because the destinations for most of the traffic along IL-159 are dispersed throughout Madison and St. Clair Counties, it is very unlikely that any measures such as adjusted work schedules or school class times would have any impact on the demand in this corridor**. Not recommended for further study.**

8.2.2. Mass Transit

While increased bus services might alleviate traffic demand to a small degree, based on current use, it is unlikely that transit options would adequately address the congestion problems in this corridor. **Accommodations for bus routes should be considered for any alternatives that are studied further in Phase I**.

8.2.3. No-Action Alternative

This alternative causes the least immediate, direct impact and involves no immediate construction cost, however, it does the least to address the project purpose and need. No-Action will result in continued congestion in the corridor, with more traffic diverting to other routes and negative impacts due to congestion for both businesses and residents. While for these reasons **the No-Action Alternative is not desirable to the City**, it is understood that study procedures require that a No-Action Alternative will be included in Phase I.

8.2.4. Existing Route Alternative

While this alternative results in some direct impacts to a few businesses and residences in the segment from Church Street to Wickliffe Avenue, it provides the most direct improvement to the traffic capacity for the corridor. This is one of the less costly alternatives and it has very little cultural or environmental impact. **This alternative is recommended for further study.**

8.2.5. Supplemental Route Option 1

This alternative is the least expensive, provides a direct, proximate supplemental route and creates very little cultural or environmental impact, however, it requires relocation of or impact to at least twice as many residents as the improvement to the existing route. Since this alternative basically shifts impact from an existing route to a residential street with extensive impact, **it is not recommended for further study.**

8.2.6. Supplemental Route Option 2

Although this alternative utilizes a more heavily traveled route (Spring Street) than those used in Option 1, it still impacts nearly twice as many residents as the improvement to the existing route. Since this alternative shifts impact from an existing route to another street with little change in overall impact, **it is not recommended for further study**

8.2.7. Supplemental Route Option 3

This alternative is the least expensive option with the most direct route around the most difficult segment of the existing route, but it requires relocation of as many as 60 residences along Portland Street, and significantly affects nearly another 40 residences that would remain on the route. Since this alternative basically shifts impact from an existing route to a residential street with extensive impact, **it is not recommended for further study.**

8.2.8. Supplemental Route Option 4

While this alternative provides a direct supplemental route from the south to the north limits of the study area, it has the potential to impact several parks, a cemetery and a hazardous waste site. Since this alternative shifts impact from an existing route to a residential area, has the potential for significant environmental impact and does not improve access to the east, **it is not recommended for further study.**

8.2.9. Supplemental Route Option 5

This alternative reduces impact to existing residences and businesses by providing a supplemental route east of the urbanized area. Because it follows an old rail corridor along Canteen Creek, it has the potential for significant floodplain, wetland and habitat impact, **and is not recommended for further study.**

8.2.10. Supplemental Route Option 6

While this alternative is the most costly because it includes the improvement of a significant length of connecting streets, it provides a supplemental route around the congested segment of the existing route with the least direct social and environmental impact. Since this corridor is not developed densely, it is assumed that the alignment can be refined in Phase I to address concerns expressed by residents in this area. Sub-options for the north and south ends of the corridor are shown in Figure 8-1, and should be considered in future studies. **This alternative is recommended for further study.**

8.3. Next Phase of Study

The current plan is for IDOT to advertise for and select a consulting firm to complete a Phase I environmental and engineering study in fall 2004. Depending on the final alternative selected, Phase I and Phase II could take from three to five years. Land acquisition would therefore begin no earlier than 2007, with construction no earlier than 2008.

APPENDIX A
GROUND PHOTOS, TOPOGRAPHIC AND AERIAL MAPS, LAND USE MAPS

APPENDIX B
CITY COMPREHENSIVE PLAN

APPENDIX C
TRAFFIC ANALYSIS

APPENDIX D
COST ESTIMATES

APPENDIX E
COORDINATION WITH PUBLIC AGENCIES
COMMENT LETTERS

APPENDIX E
COORDINATION WITH PUBLIC AGENCIES
MEETING MINUTES

APPENDIX E
COORDINATION WITH PUBLIC AGENCIES
MEETING HANDOUTS

APPENDIX F
PUBLIC MEETING COMMENTS
FEBRUARY MEETING

APPENDIX F
PUBLIC MEETING COMMENTS
MAY MEETING

APPENDIX F
PETITION RECEIVED AT
JUNE COUNCIL WORKSHOP

APPENDIX G
NEWSPAPER ARTICLES AND PRESS RELEASES